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| (54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs)   |  |  |   |
| (57) Abstract<br><br>Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.  |  |  |   |

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## SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

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FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

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BACKGROUND OF THE INVENTION

Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

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Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect.

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Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

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Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted

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proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

#### SUMMARY OF THE INVENTION

5           The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

          In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

20 In other embodiments, the present invention provides an isolated polynucleotide  
consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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10 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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NO:1421, SEQ ID NO:1422, SEQ ID NO:1423, SEQ ID NO:1424, SEQ ID

NO:1425, SEQ ID NO:1426, SEQ ID NO:1427, SEQ ID NO:1428, SEQ ID  
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 10 NO:1461, SEQ ID NO:1462, SEQ ID NO:1463, SEQ ID NO:1464, SEQ ID  
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 NO:1505, SEQ ID NO:1506, SEQ ID NO:1507, SEQ ID NO:1508, SEQ ID  
 NO:1509, SEQ ID NO:1510, SEQ ID NO:1511, SEQ ID NO:1512, SEQ ID  
 NO:1513, SEQ ID NO:1514, SEQ ID NO:1515, SEQ ID NO:1516, SEQ ID  
 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;  
 25 or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides.

#### DETAILED DESCRIPTION

30 The nucleotide sequences of the sESTs of the present invention are reported in the  
 Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each  
 SEQ ID NO: in the Sequence Listing.

Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

|    |    |       |          |    |       |     |       |
|----|----|-------|----------|----|-------|-----|-------|
|    | 1  | BK8   | 32       | 62 | DY307 | 93  | DY611 |
| 5  | 2  | BV216 | DW1001   | 63 | DY643 | 94  | EC259 |
|    | 3  | BV274 | 33 DW831 | 64 | DY656 | 95  | DY711 |
|    | 4  | BV48  | 34 DW859 | 65 | DY675 | 96  | EC248 |
|    | 5  | DN351 | 35 DW875 | 66 | DY988 | 97  | EC32  |
|    | 6  | DN381 | 36 DW888 | 67 | DY992 | 98  | DO703 |
| 10 | 7  | DN405 | 37 DW901 | 68 | DY225 | 99  | DO713 |
|    | 8  | DU651 | 38 DW902 | 69 | DY236 | 100 | DR294 |
|    | 9  | DU660 | 39 DW904 | 70 | DY242 | 101 | DY1   |
|    | 10 | DU675 | 40 DW905 | 71 | DY254 | 102 | DY10  |
|    | 11 | DU684 | 41 DW906 | 72 | DY914 | 103 | DY106 |
| 15 | 12 | DD364 | 42 DW929 | 73 | DY946 | 104 | DY117 |
|    | 13 | DD379 | 43 DW981 | 74 | DY955 | 105 | DY148 |
|    | 14 | DD389 | 44 DX191 | 75 | DY959 | 106 | DY167 |
|    | 15 | DD401 | 45 DX219 | 76 | DY961 | 107 | DY17  |
|    | 16 | DD413 | 46 DX245 | 77 | DY981 | 108 | DY174 |
| 20 | 17 | DD426 | 47 DX256 | 78 | DY357 | 109 | DY175 |
|    | 18 | DD428 | 48 DX267 | 79 | DY358 | 110 | DY178 |
|    | 19 | DN293 | 49 DX66  | 80 | DY381 | 111 | DY23  |
|    | 20 | DD454 | 50 DX81  | 81 | DY413 | 112 | DY27  |
|    | 21 | DD472 | 51 DY780 | 82 | DY414 | 113 | DY41  |
| 25 | 22 | DD475 | 52 DY803 | 83 | DY415 | 114 | DY42  |
|    | 23 | DT306 | 53 DY809 | 84 | DY431 | 115 | DY8   |
|    | 24 | DW282 | 54 DY814 | 85 | DY433 | 116 | DY93  |
|    | 25 | DW300 | 55 DY261 | 86 | DY436 | 117 | EB107 |
|    | 26 | DW303 | 56 DY264 | 87 | DY543 | 118 | EB113 |
| 30 | 27 | DW323 | 57 DY266 | 88 | DY565 | 119 | EB163 |
|    | 28 | DT258 | 58 DY271 | 89 | DY585 | 120 | EB25  |
|    | 29 | DW246 | 59 DY287 | 90 | DY331 | 121 | EB77  |
|    | 30 | DW324 | 60 DY297 | 91 | DY586 | 122 | EC172 |
|    | 31 | DW333 | 61 DY306 | 92 | DY696 | 123 | EC302 |

|    |     |        |     |       |     |       |     |       |
|----|-----|--------|-----|-------|-----|-------|-----|-------|
|    | 124 | EC317  | 158 | EJ90  | 192 | EJ224 | 226 | EP378 |
|    | 125 | EC328  | 159 | EM270 | 193 | EJ240 | 227 | EP38  |
|    | 126 | EC341  | 160 | EM278 | 194 | EJ254 | 228 | EO109 |
|    | 127 | EC349  | 161 | EN186 | 195 | EJ258 | 229 | EO120 |
| 5  | 128 | ED105  | 162 | EN215 | 196 | EJ265 | 230 | EQ166 |
|    | 129 | ED21   | 163 | EN217 | 197 | EJ280 | 231 | EQ187 |
|    | 130 | ED23   | 164 | EN234 | 198 | EJ285 | 232 | EQ188 |
|    | 131 | ED30   | 165 | EN239 | 199 | EJ307 | 233 | EQ190 |
|    | 132 | ED43   | 166 | EN256 | 200 | EJ38  | 234 | EQ194 |
| 10 | 133 | ED54   | 167 | EN260 | 201 | DO235 | 235 | EQ207 |
|    | 134 | EE177  | 168 | EN264 | 202 | DO238 | 236 | EQ208 |
|    | 135 | EE65   | 169 | EN266 | 203 | DO263 | 237 | EQ214 |
|    | 136 | DQ365  | 170 | EN271 | 204 | DO319 | 238 | EQ215 |
|    | 137 | DK393  | 171 | EN274 | 205 | EJ324 | 239 | EQ218 |
| 15 | 138 | DK399  | 172 | EN287 | 206 | EN470 | 240 | EQ219 |
|    | 139 | DO1128 | 173 | EN310 | 207 | EN477 | 241 | EQ220 |
|    | 140 | DO1150 | 174 | EN342 | 208 | EN539 | 242 | EQ221 |
|    | 141 | DZ34   | 175 | EN363 | 209 | EP451 | 243 | EQ226 |
|    | 142 | DZ42   | 176 | EN423 | 210 | EO10  | 244 | EQ229 |
| 20 | 143 | EE116  | 177 | EH106 | 211 | EO14  | 245 | EQ230 |
|    | 144 | EE93   | 178 | EH145 | 212 | EO48  | 246 | EQ231 |
|    | 145 | DJ387  | 179 | EH166 | 213 | EO58  | 247 | EQ233 |
|    | 146 | DJ402  | 180 | EH167 | 214 | EO60  | 248 | EQ237 |
|    | 147 | DN551  | 181 | EH178 | 215 | EO62  | 249 | EQ261 |
| 25 | 148 | DN559  | 182 | EH180 | 216 | EO68  | 250 | EQ272 |
|    | 149 | DN603  | 183 | EH186 | 217 | EO89  | 251 | ER104 |
|    | 150 | DN629  | 184 | EH188 | 218 | EO90  | 252 | ER106 |
|    | 151 | DN631  | 185 | EH189 | 219 | EO92  | 253 | ER128 |
|    | 152 | DO11   | 186 | EH190 | 220 | EO97  | 254 | ER134 |
| 30 | 153 | DO118  | 187 | EH203 | 221 | EP108 | 255 | ER174 |
|    | 154 | DO15   | 188 | EH206 | 222 | EP165 | 256 | ER201 |
|    | 155 | DO157  | 189 | EH95  | 223 | EP219 | 257 | ER77  |
|    | 156 | DO19   | 190 | EJ148 | 224 | EP234 | 258 | ER80  |
|    | 157 | EJ53   | 191 | EJ179 | 225 | EP277 | 259 | ER97  |

|    |     |       |     |       |     |       |     |       |
|----|-----|-------|-----|-------|-----|-------|-----|-------|
|    | 260 | ES136 | 294 | ER399 | 328 | FB264 | 362 | FG208 |
|    | 261 | ES306 | 295 | ER408 | 329 | FB38  | 363 | FG265 |
|    | 262 | ES35  | 296 | ER418 | 330 | FB71  | 364 | FG274 |
|    | 263 | ES37  | 297 | ER430 | 331 | FB78  | 365 | FG278 |
| 5  | 264 | ES206 | 298 | ER471 | 332 | FC12  | 366 | FG281 |
|    | 265 | ET13  | 299 | ER476 | 333 | FB349 | 367 | FG291 |
|    | 266 | ET22  | 300 | ER493 | 334 | FC136 | 368 | FG294 |
|    | 267 | ET39  | 301 | ER496 | 335 | FC170 | 369 | FG340 |
|    | 268 | ET84  | 302 | ER498 | 336 | FD152 | 370 | FG363 |
| 10 | 269 | EF121 | 303 | ER524 | 337 | FE141 | 371 | FG372 |
|    | 270 | EF129 | 304 | EW13  | 338 | FE5   | 372 | FG380 |
|    | 271 | EF45  | 305 | EX25  | 339 | FD131 | 373 | FG401 |
|    | 272 | EF48  | 306 | EX53  | 340 | EC425 | 374 | FG99  |
|    | 273 | EF5   | 307 | EY165 | 341 | EC428 | 375 | FI203 |
| 15 | 274 | EF88  | 308 | EY29  | 342 | ED204 | 376 | FE311 |
|    | 275 | EG194 | 309 | EZ35  | 343 | ED205 | 377 | FE315 |
|    | 276 | EG251 | 310 | EZ4   | 344 | ED210 | 378 | FE322 |
|    | 277 | EH12  | 311 | EZ88  | 345 | ED223 | 379 | FE329 |
|    | 278 | EH213 | 312 | EZ93  | 346 | DI301 | 380 | FE341 |
| 20 | 279 | EH22  | 313 | FA8   | 347 | DI303 | 381 | FE366 |
|    | 280 | EH221 | 314 | EV234 | 348 | DI310 | 382 | FE375 |
|    | 281 | EH248 | 315 | EW101 | 349 | DI39  | 383 | FE412 |
|    | 282 | EH29  | 316 | EW109 | 350 | DJ90  | 384 | FE415 |
|    | 283 | EH61  | 317 | EW150 | 351 | DM290 | 385 | FE442 |
| 25 | 284 | EH68  | 318 | EY197 | 352 | DM304 | 386 | FE472 |
|    | 285 | EH78  | 319 | EY206 | 353 | DN618 | 387 | FE557 |
|    | 286 | EH80  | 320 | EY215 | 354 | DN896 | 388 | FE568 |
|    | 287 | ER311 | 321 | EZ209 | 355 | DN904 | 389 | FE619 |
|    | 288 | ER329 | 322 | FA139 | 356 | FG119 | 390 | FE676 |
| 30 | 289 | ER343 | 323 | FA171 | 357 | FG126 | 391 | FE682 |
|    | 290 | ER366 | 324 | FA252 | 358 | FG140 | 392 | FF150 |
|    | 291 | ER369 | 325 | FA28  | 359 | FG193 | 393 | FF153 |
|    | 292 | ER381 | 326 | FA316 | 360 | FG197 | 394 | FF168 |
|    | 293 | ER395 | 327 | FA95  | 361 | FG198 | 395 | FF175 |

|    |     |       |     |       |     |       |     |       |
|----|-----|-------|-----|-------|-----|-------|-----|-------|
|    | 396 | FF181 | 430 | FH17  | 464 | FN203 | 498 | FO201 |
|    | 397 | FF46  | 431 | FH170 | 465 | FN228 | 499 | FO209 |
|    | 398 | FF49  | 432 | FH24  | 466 | FN229 | 500 | FO211 |
|    | 399 | FF97  | 433 | FH3   | 467 | FN251 | 501 | FO215 |
| 5  | 400 | FG41  | 434 | FH39  | 468 | FN254 | 502 | FO253 |
|    | 401 | FG437 | 435 | FH56  | 469 | FP134 | 503 | FO254 |
|    | 402 | FG441 | 436 | FH6   | 470 | FP14  | 504 | FO261 |
|    | 403 | FG448 | 437 | FH66  | 471 | FP163 | 505 | FO267 |
|    | 404 | FG45  | 438 | FM109 | 472 | FP172 | 506 | FO275 |
| 10 | 405 | FG492 | 439 | FM13  | 473 | FP71  | 507 | FO290 |
|    | 406 | FG504 | 440 | FM15  | 474 | FP87  | 508 | FO292 |
|    | 407 | FG565 | 441 | FM150 | 475 | EI118 | 509 | FO316 |
|    | 408 | FG567 | 442 | FM170 | 476 | EI16  | 510 | FO324 |
|    | 409 | FG57  | 443 | FM28  | 477 | EI187 | 511 | FO327 |
| 15 | 410 | FG577 | 444 | FM3   | 478 | EI203 | 512 | FO348 |
|    | 411 | FG615 | 445 | FM32  | 479 | EI228 | 513 | FO36  |
|    | 412 | FG625 | 446 | FM36  | 480 | EI231 | 514 | FO38  |
|    | 413 | FG630 | 447 | FM60  | 481 | EI236 | 515 | FO40  |
|    | 414 | FG659 | 448 | FM86  | 482 | EI239 | 516 | FO66  |
| 20 | 415 | FG708 | 449 | FM95  | 483 | EI243 | 517 | FO75  |
|    | 416 | FG91  | 450 | FM98  | 484 | EI250 | 518 | FP185 |
|    | 417 | FG884 | 451 | FM99  | 485 | EI255 | 519 | FP193 |
|    | 418 | FG891 | 452 | FN172 | 486 | EI264 | 520 | FP233 |
|    | 419 | FG909 | 453 | FN19  | 487 | EI273 | 521 | FP239 |
| 25 | 420 | FG912 | 454 | FN29  | 488 | FO11  | 522 | FP246 |
|    | 421 | FG949 | 455 | FN53  | 489 | FO125 | 523 | FP262 |
|    | 422 | FG952 | 456 | FK199 | 490 | FO128 | 524 | FP268 |
|    | 423 | FG965 | 457 | FK217 | 491 | FO133 | 525 | FP271 |
|    | 424 | FH10  | 458 | FK23  | 492 | FO135 | 526 | FP273 |
| 30 | 425 | FH116 | 459 | FK32  | 493 | FO147 | 527 | FQ505 |
|    | 426 | FH123 | 460 | FK59  | 494 | FO152 | 528 | DN647 |
|    | 427 | FH13  | 461 | FK78  | 495 | FO160 | 529 | DN650 |
|    | 428 | FH136 | 462 | FN189 | 496 | FO173 | 530 | DN676 |
|    | 429 | FH149 | 463 | FN191 | 497 | FO182 | 531 | DO94  |

|    |     |        |     |        |     |       |     |       |
|----|-----|--------|-----|--------|-----|-------|-----|-------|
|    | 532 | FR292  | 566 | DN827  | 600 | FY201 | 634 | DU4   |
|    | 533 | FR436  | 567 | DN833  | 601 | FY202 | 635 | DU75  |
|    | 534 | FR451  | 568 | DN834  | 602 | FY243 | 636 | FY386 |
|    | 535 | FR473  | 569 | DN850  | 603 | FY265 | 637 | FY388 |
| 5  | 536 | FS10   | 570 | DO913  | 604 | FY316 | 638 | FY398 |
|    | 537 | FS106  | 571 | DO923  | 605 | FY318 | 639 | FY414 |
|    | 538 | FS107  | 572 | DO935  | 606 | FY321 | 640 | GA48  |
|    | 539 | FS143  | 573 | DO938  | 607 | FY354 | 641 | GA63  |
|    | 540 | FS173  | 574 | DO944  | 608 | FY356 | 642 | GA64  |
| 10 | 541 | FS28   | 575 | DO949  | 609 | FY421 | 643 | DT382 |
|    | 542 | FS31   | 576 | DO952  | 610 | FY430 | 644 | DT385 |
|    | 543 | FS40   | 577 | DQ12   | 611 | FY455 | 645 | DT388 |
|    | 544 | FV35   | 578 | DT2    | 612 | FY484 | 646 | DT464 |
|    | 545 | FV49   | 579 | DT44   | 613 | FY524 | 647 | DT470 |
| 15 | 546 | FV68   | 580 | DT53   | 614 | FY530 | 648 | DT478 |
|    | 547 | FW13   | 581 | DT8    | 615 | FY628 | 649 | DT482 |
|    | 548 | FW64   | 582 | FQ661  | 616 | DQ242 | 650 | DU114 |
|    | 549 | FY127  | 583 | FQ672  | 617 | DQ262 | 651 | DU118 |
|    | 550 | FY136  | 584 | FQ696  | 618 | DQ276 | 652 | DU123 |
| 20 | 551 | FY60   | 585 | FR1087 | 619 | DQ285 | 653 | DU133 |
|    | 552 | FY65   | 586 | FR927  | 620 | DQ304 | 654 | DU156 |
|    | 553 | FY72   | 587 | FR938  | 621 | DQ313 | 655 | DU157 |
|    | 554 | DN1112 | 588 | FR980  | 622 | DQ51  | 656 | FZ5   |
|    | 555 | DN1118 | 589 | FV122  | 623 | DQ54  | 657 | FZ87  |
| 25 | 556 | DN1122 | 590 | FV131  | 624 | DR628 | 658 | DW181 |
|    | 557 | DN782  | 591 | FV132  | 625 | GU215 | 659 | DW309 |
|    | 558 | DN793  | 592 | FV84   | 626 | FM481 | 660 | DX1   |
|    | 559 | DN795  | 593 | FV85   | 627 | DT117 | 661 | DX15  |
|    | 560 | DN806  | 594 | FV95   | 628 | DT133 | 662 | DX19  |
| 30 | 561 | DN809  | 595 | FX115  | 629 | DT139 | 663 | DX22  |
|    | 562 | DN810  | 596 | FX127  | 630 | DT164 | 664 | DX29  |
|    | 563 | DN814  | 597 | FX154  | 631 | DU160 | 665 | DX3   |
|    | 564 | DN815  | 598 | FY187  | 632 | DU164 | 666 | DX4   |
|    | 565 | DN823  | 599 | FY199  | 633 | DU166 | 667 | FZ428 |

|    |     |       |     |       |     |       |     |        |
|----|-----|-------|-----|-------|-----|-------|-----|--------|
|    | 668 | FZ163 | 702 | FZ209 | 736 | GE89  | 770 | GF151  |
|    | 669 | DY474 | 703 | FZ254 | 737 | DY516 | 771 | GF179  |
|    | 670 | FZ139 | 704 | FZ346 | 738 | DY529 | 772 | GF99   |
|    | 671 | FX76  | 705 | GA82  | 739 | DY530 | 773 | GB261  |
| 5  | 672 | FX65  | 706 | GA85  | 740 | DY538 | 774 | GC499  |
|    | 673 | FX55  | 707 | GA91  | 741 | DY830 | 775 | GD177  |
|    | 674 | DU536 | 708 | DX299 | 742 | DY857 | 776 | GD7    |
|    | 675 | FZ534 | 709 | DX304 | 743 | EA17  | 777 | GE300  |
|    | 676 | DU515 | 710 | DX309 | 744 | EA36  | 778 | DX179  |
| 10 | 677 | DU475 | 711 | DX316 | 745 | GG73  | 779 | DY757  |
|    | 678 | DU462 | 712 | DX328 | 746 | DU544 | 780 | EC392  |
|    | 679 | DU353 | 713 | DX336 | 747 | DU560 | 781 | EE15   |
|    | 680 | DU341 | 714 | DX354 | 748 | DZ109 | 782 | DU408  |
|    | 681 | DU306 | 715 | DX357 | 749 | EA105 | 783 | DU410  |
| 15 | 682 | DU278 | 716 | DX359 | 750 | EA106 | 784 | DU416  |
|    | 683 | DU244 | 717 | DX363 | 751 | EA110 | 785 | DU447  |
|    | 684 | DU238 | 718 | DX364 | 752 | EA123 | 786 | DX111  |
|    | 685 | DU236 | 719 | DY478 | 753 | EA46  | 787 | DX112  |
|    | 686 | DU231 | 720 | DY497 | 754 | EA58  | 788 | DX123  |
| 20 | 687 | FZ639 | 721 | DY508 | 755 | EA7   | 789 | DX138  |
|    | 688 | GC456 | 722 | EA89  | 756 | EA82  | 790 | DX146  |
|    | 689 | GG126 | 723 | EA9   | 757 | GE361 | 791 | DX153  |
|    | 690 | GG129 | 724 | EA90  | 758 | FZ510 | 792 | DX157  |
|    | 691 | GG152 | 725 | GC52  | 759 | GE387 | 793 | EE4    |
| 25 | 692 | GG170 | 726 | GC57  | 760 | GE410 | 794 | FZ676  |
|    | 693 | GG182 | 727 | GC585 | 761 | GE463 | 795 | FZ683  |
|    | 694 | GG217 | 728 | GC74  | 762 | GE466 | 796 | GD309  |
|    | 695 | GG440 | 729 | GE28  | 763 | GE468 | 797 | GD358  |
|    | 696 | GG619 | 730 | GE41  | 764 | GE471 | 798 | GG543  |
| 30 | 697 | DX279 | 731 | GE51  | 765 | GE524 | 799 | FX516  |
|    | 698 | DX288 | 732 | GE60  | 766 | GE539 | 800 | FX536  |
|    | 699 | DX290 | 733 | GE68  | 767 | GE548 | 801 | FZ1032 |
|    | 700 | DX295 | 734 | GE80  | 768 | GE549 | 802 | FZ1041 |
|    | 701 | DX298 | 735 | GE82  | 769 | GE99  | 803 | FZ1072 |

|    |     |       |     |       |     |       |     |       |
|----|-----|-------|-----|-------|-----|-------|-----|-------|
|    | 804 | FZ781 | 838 | DD12  | 872 | GP304 | 906 | EM40  |
|    | 805 | GA147 | 839 | DD127 | 873 | GP329 | 907 | EM42  |
|    | 806 | GA284 | 840 | DD177 | 874 | GP338 | 908 | EM58  |
|    | 807 | DY723 | 841 | DD204 | 875 | GP340 | 909 | GF185 |
| 5  | 808 | DY737 | 842 | DD207 | 876 | GQ13  | 910 | GF187 |
|    | 809 | DY739 | 843 | DD211 | 877 | GQ18  | 911 | GF196 |
|    | 810 | EC399 | 844 | DD217 | 878 | GQ22  | 912 | GF197 |
|    | 811 | EM254 | 845 | DD504 | 879 | GQ38  | 913 | GF207 |
|    | 812 | FX194 | 846 | DD509 | 880 | GQ40  | 914 | GF209 |
| 10 | 813 | FX234 | 847 | DD518 | 881 | GQ56  | 915 | GF212 |
|    | 814 | FX281 | 848 | DD537 | 882 | GQ6   | 916 | GF218 |
|    | 815 | FX317 | 849 | DD541 | 883 | DD312 | 917 | GF221 |
|    | 816 | FX353 | 850 | DD71  | 884 | DD352 | 918 | GF222 |
|    | 817 | FX395 | 851 | DH941 | 885 | EK145 | 919 | GF250 |
| 15 | 818 | GA293 | 852 | DQ194 | 886 | EK208 | 920 | GF255 |
|    | 819 | GA321 | 853 | DQ204 | 887 | EK223 | 921 | GF256 |
|    | 820 | GA327 | 854 | DQ215 | 888 | EK234 | 922 | GI28  |
|    | 821 | GB160 | 855 | DQ216 | 889 | EK480 | 923 | GI3   |
|    | 822 | GA132 | 856 | EK423 | 890 | EK491 | 924 | GI30  |
| 20 | 823 | GA135 | 857 | EK424 | 891 | EK499 | 925 | GI51  |
|    | 824 | GA205 | 858 | EK450 | 892 | EK571 | 926 | GI63  |
|    | 825 | GB814 | 859 | EL15  | 893 | EK578 | 927 | GI7   |
|    | 826 | GF87  | 860 | DD285 | 894 | EK581 | 928 | GI74  |
|    | 827 | GG687 | 861 | EK598 | 895 | EK591 | 929 | GI88  |
| 25 | 828 | GG692 | 862 | EK622 | 896 | DD215 | 930 | GI9   |
|    | 829 | GG694 | 863 | EK626 | 897 | EK634 | 931 | DY874 |
|    | 830 | GG702 | 864 | EK649 | 898 | EL358 | 932 | DY886 |
|    | 831 | GG705 | 865 | GO653 | 899 | EL360 | 933 | DY900 |
|    | 832 | GP23  | 866 | GP107 | 900 | EL387 | 934 | EM358 |
| 30 | 833 | GP56  | 867 | GP123 | 901 | EL391 | 935 | EM381 |
|    | 834 | GP61  | 868 | GP168 | 902 | EM111 | 936 | EM386 |
|    | 835 | GP65  | 869 | GP232 | 903 | EM112 | 937 | EM388 |
|    | 836 | DD115 | 870 | GP274 | 904 | EM12  | 938 | EM396 |
|    | 837 | DD119 | 871 | GP297 | 905 | EM125 | 939 | EM397 |

|    |     |       |      |       |      |       |      |       |
|----|-----|-------|------|-------|------|-------|------|-------|
|    | 940 | EM401 | 974  | GT43  | 1008 | HU212 | 1042 | EY290 |
|    | 941 | EM406 | 975  | GT6   | 1009 | HU141 | 1043 | EY304 |
|    | 942 | EM408 | 976  | HR712 | 1010 | HS555 | 1044 | EY313 |
|    | 943 | EM409 | 977  | HR704 | 1011 | HR95  | 1045 | FK295 |
| 5  | 944 | EM423 | 978  | HR693 | 1012 | HR906 | 1046 | FK301 |
|    | 945 | EM424 | 979  | HR628 | 1013 | HR76  | 1047 | FK317 |
|    | 946 | FE196 | 980  | HR605 | 1014 | HR753 | 1048 | FK328 |
|    | 947 | FE204 | 981  | EK341 | 1015 | HR731 | 1049 | FK349 |
|    | 948 | FE205 | 982  | EK390 | 1016 | EN116 | 1050 | FK350 |
| 10 | 949 | FE207 | 983  | EN108 | 1017 | EM341 | 1051 | FK354 |
|    | 950 | FE215 | 984  | FK235 | 1018 | FJ283 | 1052 | FK365 |
|    | 951 | FE222 | 985  | GK428 | 1019 | FJ307 | 1053 | FQ105 |
|    | 952 | FE227 | 986  | GT56  | 1020 | FJ70  | 1054 | FQ239 |
|    | 953 | FE228 | 987  | FQ562 | 1021 | FM176 | 1055 | FQ360 |
| 15 | 954 | FE248 | 988  | FQ605 | 1022 | FM197 | 1056 | FQ45  |
|    | 955 | FE263 | 989  | FQ608 | 1023 | FM205 | 1057 | GU353 |
|    | 956 | FE271 | 990  | FQ609 | 1024 | FM208 | 1058 | GX167 |
|    | 957 | GF296 | 991  | FQ612 | 1025 | FM229 | 1059 | GX183 |
|    | 958 | GN38  | 992  | FS49  | 1026 | FQ419 | 1060 | GX208 |
| 20 | 959 | GN45  | 993  | FS87  | 1027 | GX48  | 1061 | GX210 |
|    | 960 | GN60  | 994  | GM101 | 1028 | GX5   | 1062 | FM369 |
|    | 961 | GN68  | 995  | GM103 | 1029 | GX92  | 1063 | FM375 |
|    | 962 | GN82  | 996  | GM114 | 1030 | FM289 | 1064 | FM389 |
|    | 963 | GR286 | 997  | GM129 | 1031 | FM290 | 1065 | FM432 |
| 25 | 964 | EN10  | 998  | GM153 | 1032 | FM296 | 1066 | FM459 |
|    | 965 | EN37  | 999  | GM158 | 1033 | FM300 | 1067 | FM462 |
|    | 966 | FK127 | 1000 | GM196 | 1034 | FM312 | 1068 | FM479 |
|    | 967 | FK151 | 1001 | GM243 | 1035 | GU512 | 1069 | GX301 |
|    | 968 | GS26  | 1002 | GM259 | 1036 | GU534 | 1070 | GX336 |
| 30 | 969 | GS4   | 1003 | GM266 | 1037 | GU608 | 1071 | GX354 |
|    | 970 | EV391 | 1004 | HV38  | 1038 | GX159 | 1072 | GX361 |
|    | 971 | FG535 | 1005 | HV23  | 1039 | GX97  | 1073 | GX403 |
|    | 972 | FG852 | 1006 | HV199 | 1040 | EW304 | 1074 | GX408 |
|    | 973 | GT28  | 1007 | HV181 | 1041 | EY281 | 1075 | GX418 |

|    |      |        |      |       |      |        |      |       |
|----|------|--------|------|-------|------|--------|------|-------|
|    | 1076 | GU830  | 1110 | GG3   | 1144 | GN97   | 1178 | HE91  |
|    | 1077 | GU925  | 1111 | HA510 | 1145 | HB443  | 1179 | HF289 |
|    | 1078 | GU940  | 1112 | HA422 | 1146 | HC324  | 1180 | HG444 |
|    | 1079 | GX1031 | 1113 | HA382 | 1147 | HC327  | 1181 | HF137 |
| 5  | 1080 | GX496  | 1114 | HA360 | 1148 | HC505  | 1182 | HD706 |
|    | 1081 | GX504  | 1115 | HA249 | 1149 | HC724  | 1183 | HG710 |
|    | 1082 | GX509  | 1116 | HA199 | 1150 | HA1054 | 1184 | HG733 |
|    | 1083 | GX536  | 1117 | HA192 | 1151 | HB1041 | 1185 | HG775 |
|    | 1084 | GX540  | 1118 | GZ568 | 1152 | HB746  | 1186 | HI222 |
| 10 | 1085 | GX645  | 1119 | GY520 | 1153 | HB752  | 1187 | HI39  |
|    | 1086 | GX700  | 1120 | GY515 | 1154 | HB975  | 1188 | HH215 |
|    | 1087 | GX730  | 1121 | GY330 | 1155 | HC705  | 1189 | HH357 |
|    | 1088 | GX750  | 1122 | GY307 | 1156 | HA791  | 1190 | HH372 |
|    | 1089 | GX753  | 1123 | HA81  | 1157 | HC1002 | 1191 | HH378 |
| 15 | 1090 | GX760  | 1124 | HA73  | 1158 | HC1071 | 1192 | HH390 |
|    | 1091 | GX814  | 1125 | HA29  | 1159 | HC1089 | 1193 | HH396 |
|    | 1092 | GX851  | 1126 | HA24  | 1160 | HC831  | 1194 | HH404 |
|    | 1093 | GX909  | 1127 | HA18  | 1161 | HC986  | 1195 | HH433 |
|    | 1094 | GY102  | 1128 | GZ78  | 1162 | GY72   | 1196 | HI2   |
| 20 | 1095 | GY105  | 1129 | GZ70  | 1163 | HG159  | 1197 | HH544 |
|    | 1096 | GY138  | 1130 | GZ7   | 1164 | HG620  | 1198 | HH608 |
|    | 1097 | GY211  | 1131 | GZ496 | 1165 | HD161  | 1199 | HH612 |
|    | 1098 | GX1082 | 1132 | GZ495 | 1166 | HD353  | 1200 | HH625 |
|    | 1099 | GX1108 | 1133 | GZ485 | 1167 | HD378  | 1201 | HH640 |
| 25 | 1100 | GX1140 | 1134 | GZ436 | 1168 | HD417  | 1202 | HH648 |
|    | 1101 | GX1165 | 1135 | GZ420 | 1169 | HD427  | 1203 | HH691 |
|    | 1102 | GX576  | 1136 | GZ378 | 1170 | HD434  | 1204 | HJ120 |
|    | 1103 | GX595  | 1137 | GZ37  | 1171 | HD499  | 1205 | HJ140 |
|    | 1104 | GX606  | 1138 | GY558 | 1172 | HD569  | 1206 | HJ181 |
| 30 | 1105 | GX619  | 1139 | GG894 | 1173 | HD627  | 1207 | HJ184 |
|    | 1106 | GG874  | 1140 | GG907 | 1174 | HD648  | 1208 | HJ22  |
|    | 1107 | GG858  | 1141 | GN114 | 1175 | HE111  | 1209 | HJ253 |
|    | 1108 | GG836  | 1142 | GN115 | 1176 | HE142  | 1210 | HJ265 |
|    | 1109 | GG8    | 1143 | GN145 | 1177 | HE178  | 1211 | HJ362 |

|    |      |        |      |       |      |        |      |       |
|----|------|--------|------|-------|------|--------|------|-------|
|    | 1212 | HJ395  | 1246 | HM372 | 1280 | HO722  | 1314 | HT166 |
|    | 1213 | HJ411  | 1247 | HM380 | 1281 | HO799  | 1315 | HT176 |
|    | 1214 | HJ444  | 1248 | HM422 | 1282 | HO801  | 1316 | HT193 |
|    | 1215 | HJ65   | 1249 | HM444 | 1283 | HO817  | 1317 | HT43  |
| 5  | 1216 | HJ674  | 1250 | HM497 | 1284 | HO82   | 1318 | HT81  |
|    | 1217 | HJ705  | 1251 | HM544 | 1285 | HK719  | 1319 | HW149 |
|    | 1218 | HJ81   | 1252 | HM643 | 1286 | HO1077 | 1320 | HW152 |
|    | 1219 | HJ862  | 1253 | HN72  | 1287 | HO1080 | 1321 | HW190 |
|    | 1220 | HJ949  | 1254 | HN78  | 1288 | HO1087 | 1322 | HW204 |
| 10 | 1221 | HK10   | 1255 | HO107 | 1289 | HO1143 | 1323 | HW221 |
|    | 1222 | HK26   | 1256 | HO237 | 1290 | HO1176 | 1324 | HW243 |
|    | 1223 | HK60   | 1257 | HO266 | 1291 | HO1183 | 1325 | HW261 |
|    | 1224 | HJ1037 | 1258 | HO277 | 1292 | HO1216 | 1326 | HW368 |
|    | 1225 | HJ968  | 1259 | HO283 | 1293 | HO1271 | 1327 | HW74  |
| 15 | 1226 | HJ981  | 1260 | HO292 | 1294 | HO1329 | 1328 | HX10  |
|    | 1227 | HJ994  | 1261 | HO294 | 1295 | HO1434 | 1329 | HX102 |
|    | 1228 | HJ995  | 1262 | HO305 | 1296 | HO1441 | 1330 | HX110 |
|    | 1229 | HK189  | 1263 | HO315 | 1297 | HO1453 | 1331 | HX113 |
|    | 1230 | HK234  | 1264 | HO332 | 1298 | HO854  | 1332 | HX155 |
| 20 | 1231 | HK650  | 1265 | HO358 | 1299 | HO868  | 1333 | HX188 |
|    | 1232 | HK658  | 1266 | HO476 | 1300 | HP262  | 1334 | HX29  |
|    | 1233 | HK669  | 1267 | HO481 | 1301 | HQ36   | 1335 | HX50  |
|    | 1234 | HK713  | 1268 | HO502 | 1302 | HQ72   | 1336 | HY13  |
|    | 1235 | HK899  | 1269 | HO54  | 1303 | GM16   | 1337 | HY3   |
| 25 | 1236 | HE187  | 1270 | HO60  | 1304 | GM286  | 1338 | HY55  |
|    | 1237 | HK162  | 1271 | HO600 | 1305 | GM295  | 1339 | HY57  |
|    | 1238 | HL25   | 1272 | HO617 | 1306 | GM335  | 1340 | HZ15  |
|    | 1239 | HL380  | 1273 | HO640 | 1307 | GM365  | 1341 | HZ8   |
|    | 1240 | HL73   | 1274 | HO663 | 1308 | HR397  | 1342 | IA1   |
| 30 | 1241 | HM50   | 1275 | HO688 | 1309 | HR560  | 1343 | IA21  |
|    | 1242 | HM54   | 1276 | HO692 | 1310 | HR593  | 1344 | IA32  |
|    | 1243 | HM91   | 1277 | HO693 | 1311 | HR598  | 1345 | IA36  |
|    | 1244 | HM236  | 1278 | HO703 | 1312 | HT13   | 1346 | IB2   |
|    | 1245 | HM280  | 1279 | HO717 | 1313 | HT137  | 1347 | IC2   |

|    |      |       |        |       |      |       |      |        |
|----|------|-------|--------|-------|------|-------|------|--------|
|    | 1348 | IC9   | 1382   | IA167 | 1413 | HW786 | 1447 | IE362  |
|    | 1349 | HY229 | 1383   | IA183 | 1414 | HW810 | 1448 | IH32   |
|    | 1350 | HY244 | 1384   | IA188 | 1415 | HW846 | 1449 | II113  |
|    | 1351 | HY344 | 1385   | IA200 | 1416 | HW849 | 1450 | IJ101  |
| 5  | 1352 | HY370 | 1386   | IA220 | 1417 | IB15  | 1451 | IJ163  |
|    | 1353 | HY374 | 1387   | IA64  | 1418 | IB19  | 1452 | IJ167  |
|    | 1354 | HY404 | 1388   | IA69  | 1419 | IB22  | 1453 | IF28   |
|    | 1355 | HY419 | 1389   | IA86  | 1420 | IB28  | 1454 | IF376  |
|    | 1356 | HY435 | 1390   | HW936 | 1421 | IB36  | 1455 | IF456  |
| 10 | 1357 | HZ103 | 1391   |       | 1422 | IB49  | 1456 | IF87   |
|    | 1358 | HZ109 | HW1017 |       | 1423 | IC103 | 1457 | IJ1201 |
|    | 1359 | HZ111 | 1392   |       | 1424 | IC126 | 1458 | IJ1220 |
|    | 1360 | HZ115 | HW1044 |       | 1425 | IC132 | 1459 | IJ1237 |
|    | 1361 | HZ71  | 1393   |       | 1426 | IC142 | 1460 | IJ1240 |
| 15 | 1362 | HZ76  | HW1059 |       | 1427 | IC155 | 1461 | IJ1247 |
|    | 1363 | HZ88  | 1394   | HW430 | 1428 | IC54  | 1462 | IJ1287 |
|    | 1364 | HW115 | 1395   | HW432 | 1429 | IC87  | 1463 | IJ1292 |
|    | 1365 | HW128 | 1396   | HW440 | 1430 | IC92  | 1464 | IJ1299 |
|    | 1366 | HW477 | 1397   | HW456 | 1431 | IE146 | 1465 | IJ583  |
| 20 | 1367 | HW483 | 1398   | HW518 | 1432 | IE147 | 1466 | IJ592  |
|    | 1368 | HW491 | 1399   | HW591 | 1433 | IE149 | 1467 | IJ597  |
|    | 1369 | HW499 | 1400   | HW598 | 1434 | IE169 | 1468 | IJ629  |
|    | 1370 | HW507 | 1401   | HW627 | 1435 | IZ6   | 1469 | IJ638  |
|    | 1371 | HZ116 | 1402   | HW646 | 1436 | JE33  | 1470 | IJ640  |
| 25 | 1372 | HZ162 | 1403   | HW649 | 1437 | JE44  | 1471 | IJ642  |
|    | 1373 | HZ185 | 1404   | HW693 | 1438 | JE52  | 1472 | IJ686  |
|    | 1374 | HZ201 | 1405   | HW695 | 1439 | IE10  | 1473 | IG25   |
|    | 1375 | HZ224 | 1406   | HW697 | 1440 | IE47  | 1474 | IG35   |
|    | 1376 | HZ262 | 1407   | HW711 | 1441 | IE73  | 1475 | IH40   |
| 30 | 1377 | IA106 | 1408   | HW715 | 1442 | JA37  | 1476 | IH54   |
|    | 1378 | IA110 | 1409   | HW730 | 1443 | JA78  | 1477 | IJ288  |
|    | 1379 | IA114 | 1410   | HW732 | 1444 | JB12  | 1478 | IJ76   |
|    | 1380 | IA153 | 1411   | HW741 | 1445 | JB23  | 1479 | IF292  |
|    | 1381 | IA157 | 1412   | HW750 | 1446 | IE352 | 1480 | IF513  |

|    |      |        |      |       |
|----|------|--------|------|-------|
|    | 1481 | IF548  | 1515 | IQ58  |
|    | 1482 | IJ1043 | 1516 | IS488 |
|    | 1483 | IJ1048 | 1517 | IS564 |
|    | 1484 | IJ1054 | 1518 | IT23  |
| 5  | 1485 | IJ1088 | 1519 | IT44  |
|    | 1486 | IJ777  |      |       |
|    | 1487 | IJ887  |      |       |
|    | 1488 | IJ907  |      |       |
|    | 1489 | IJ928  |      |       |
| 10 | 1490 | IJ942  |      |       |
|    | 1491 | IL1    |      |       |
|    | 1492 | IL100  |      |       |
|    | 1493 | IL112  |      |       |
|    | 1494 | IL28   |      |       |
| 15 | 1495 | IK11   |      |       |
|    | 1496 | IK14   |      |       |
|    | 1497 | IK20   |      |       |
|    | 1498 | IK203  |      |       |
|    | 1499 | IK209  |      |       |
| 20 | 1500 | IK212  |      |       |
|    | 1501 | IK343  |      |       |
|    | 1502 | IK73   |      |       |
|    | 1503 | IO134  |      |       |
|    | 1504 | IO138  |      |       |
| 25 | 1505 | IO151  |      |       |
|    | 1506 | IO202  |      |       |
|    | 1507 | IO209  |      |       |
|    | 1508 | IO31   |      |       |
|    | 1509 | IO356  |      |       |
| 30 | 1510 | IO420  |      |       |
|    | 1511 | IO62   |      |       |
|    | 1512 | IQ15   |      |       |
|    | 1513 | IQ45   |      |       |
|    | 1514 | IQ55   |      |       |

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions, most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

|    | Stringency Condition | Polynucleotide Hybrid | Hybrid Length (bp) <sup>2</sup> | Hybridization Temperature and Buffer <sup>1</sup> | Wash Temperature and Buffer <sup>1</sup> |
|----|----------------------|-----------------------|---------------------------------|---|--|
| 5  | A                    | DNA:DNA               | ≥ 50                            | 65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide       | 65°C; 0.3xSSC                            |
|    | B                    | DNA:DNA               | < 50                            | T <sub>B</sub> *; 1xSSC                           | T <sub>B</sub> *; 1xSSC                  |
|    | C                    | DNA:RNA               | ≥ 50                            | 67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide       | 67°C; 0.3xSSC                            |
|    | D                    | DNA:RNA               | < 50                            | T <sub>D</sub> *; 1xSSC                           | T <sub>D</sub> *; 1xSSC                  |
|    | E                    | RNA:RNA               | ≥ 50                            | 70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide       | 70°C; 0.3xSSC                            |
| 10 | F                    | RNA:RNA               | < 50                            | T <sub>F</sub> *; 1xSSC                           | T <sub>F</sub> *; 1xSSC                  |
|    | G                    | DNA:DNA               | ≥ 50                            | 65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide       | 65°C; 1xSSC                              |
|    | H                    | DNA:DNA               | < 50                            | T <sub>H</sub> *; 4xSSC                           | T <sub>H</sub> *; 4xSSC                  |
|    | I                    | DNA:RNA               | ≥ 50                            | 67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide       | 67°C; 1xSSC                              |
|    | J                    | DNA:RNA               | < 50                            | T <sub>J</sub> *; 4xSSC                           | T <sub>J</sub> *; 4xSSC                  |
| 15 | K                    | RNA:RNA               | ≥ 50                            | 70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide       | 67°C; 1xSSC                              |
|    | L                    | RNA:RNA               | < 50                            | T <sub>L</sub> *; 2xSSC                           | T <sub>L</sub> *; 2xSSC                  |
|    | M                    | DNA:DNA               | ≥ 50                            | 50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide       | 50°C; 2xSSC                              |
|    | N                    | DNA:DNA               | < 50                            | T <sub>N</sub> *; 6xSSC                           | T <sub>N</sub> *; 6xSSC                  |
|    | O                    | DNA:RNA               | ≥ 50                            | 55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide       | 55°C; 2xSSC                              |
| 20 | P                    | DNA:RNA               | < 50                            | T <sub>P</sub> *; 6xSSC                           | T <sub>P</sub> *; 6xSSC                  |
|    | Q                    | RNA:RNA               | ≥ 50                            | 60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide       | 60°C; 2xSSC                              |
|    | R                    | RNA:RNA               | < 50                            | T <sub>R</sub> *; 4xSSC                           | T <sub>R</sub> *; 4xSSC                  |

<sup>‡</sup>: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

<sup>†</sup>: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH<sub>2</sub>PO<sub>4</sub>, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

\*T<sub>B</sub> - T<sub>R</sub>: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T<sub>m</sub>) of the hybrid, where T<sub>m</sub> is determined according to the following equations. For hybrids less than 18 base pairs in length, T<sub>m</sub>(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T<sub>m</sub>(°C) = 81.5 + 16.6(log [Na<sup>+</sup>]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na<sup>+</sup>] is the concentration of sodium ions in the hybridization buffer ([Na<sup>+</sup>] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. The isolated polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* **19**, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* **185**, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

5 A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from *in vitro* culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

10 Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any  
15 bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

20 The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art,  
25 as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting  
30 expressed protein may then be purified from such culture (*i.e.*, from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which  
5 will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently  
10 purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or  
15 all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic  
20 animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are  
25 known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological  
30 processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

### USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention  
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

#### Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or  
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding  
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related  
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-  
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligand.. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

#### Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

#### Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon  $\gamma$ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.

- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

#### Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitis, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other  
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune  
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from  
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing  
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys  
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the  
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this matter prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

5 The efficacy of particular blocking reagents in preventing organ transplant rejection or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, *Science* 257:789-792 (1992) and Turka *et al.*, *Proc. Natl. Acad. Sci*  
10 *USA*, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., *Fundamental Immunology*, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating  
15 autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B  
20 lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of  
25 well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., *Fundamental Immunology*, Raven Press, New York, 1989, pp. 840-856).

30 Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient  
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding  
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably  
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor  
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection  
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or  
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I  $\alpha$  chain protein and  $\beta_2$  microglobulin protein or an MHC class II  $\alpha$  chain protein and an MHC class II  $\beta$  chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected  
5 with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured  
10 by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-  
15 3.19; Chapter 7, *Immunologic studies in Humans*); Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Takai et al., *J. Immunol.* 140:508-512, 1988; Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa  
20 et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bowman et al., *J. Virology* 61:1992-1998; Takai et al., *J. Immunol.* 140:508-512, 1988; Bertagnoli et al., *Cellular Immunology* 133:327-341, 1991; Brown et al., *J. Immunol.* 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching  
25 (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, *J. Immunol.* 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

30 Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad Sci. USA 88:7548-7551, 1991.

#### Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet  
 5 transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post  
 10 irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

15        Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al.,  
 20 *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic*  
 25 *Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994;  
 30 Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

10 A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma  
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of  
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

25 Another category of tissue regeneration activity that may be attributable to the protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein  
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

5 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium ).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,  
20 alone or in heterodimers with a member of the inhibin  $\alpha$  family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- $\beta$  group, may  
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

#### Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide  
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can  
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one  
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et  
30 al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al. J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

#### Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A  
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors  
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.  
25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those  
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

#### Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or  
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,  
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

#### Tumor Inhibition Activity

20 In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor  
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

#### Other Activities

30 A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the  
5 fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent  
10 behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for  
15 example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20

### ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5           The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides,  
10   diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15           As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient,  
20   administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

          In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a  
25   mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either  
30   simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous  
5 administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an  
10 adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain  
15 physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical  
20 composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers,  
25 antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01  $\mu$ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1  $\mu$ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem. Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also  
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and  
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices  
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such  
20 as sintered hydroxyapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- $\alpha$  and TGF- $\beta$ ), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

| Sel. | Species | Tissue       | Cell Type                      |
|------|---------|--------------|--------------------------------|
| AA   | Human   | Kidney       | 19-23wks., M/F pool of 5       |
| AB   | Human   | Fetal Lung   | Fetal Lung                     |
| AC   | Human   | Placenta     | 26yrs., 1 specimen             |
| AD   | Murine  | Embryo       | Fetal ES cells                 |
| AE   | Murine  | Spleen       | Adult spleen                   |
| AF   | Murine  | Fetal Brain  | Fetal Brain                    |
| AG   | Murine  | Fetal Brain  | Fetal Brain                    |
| AH   | Murine  | Fetal Thymus | Fetal Thymus                   |
| AI   | Human   | Blood        | Adult PBMC/TH1or2              |
| AJ   | Human   | Testes       | 10-61yrs., pool of 11          |
| AK   | Human   | Kidney       | 19-23wks., M/F pool of 5       |
| AL   | Human   | Neural       | Adult Glioblastoma line TG-1   |
| AM   | Human   | Kidney       | 19-23wks., M/F pool of 5       |
| AN   | Murine  | Bone Marrow  | Adult Stromal cell line FCM-4  |
| AO   | Murine  | Thymus       | Adult Subtr. Adult Thymus      |
| AP   | Human   | Placenta     | 26yrs., 1 specimen             |
| AQ   | Human   | Ovary        | PA-1 Teratocarcinoma           |
| AR   | Human   | Retina       | 16-75yrs., pool of 76          |
| AS   | Human   | Brain        | 19-23wks., M/F pool of 5       |
| AT   | Human   | Blood        | Adult lymphocytes+dend. cells  |
| AU   | Human   | Testes       | 10-61yrs., pool of 11          |
| AV   | Murine  | Spleen       | Adult spleen                   |
| AW   | Human   | Ovary        | PA-1 Teratocarcinoma           |
| AX   | Human   | Testes       | 10-61yrs., pool of 11          |
| AY   | Human   | Retina       | 16-75yrs., pool of 76          |
| AZ   | Human   | Colon        | Caco-2 Adenocarcinoma          |
| B    | Human   | Blood        | PeripheralBloodMononuclearCell |
| BA   | Human   | Placenta     | 26yrs., 1 specimen             |
| BB   | Human   | Blood        | Adult PBMC/TH1or2              |
| BC   | Murine  | Embryo       | Fetal ES cells                 |
| BD   | Human   | Kidney       | 19-23wks., M/F pool of 5       |
| BE   | Human   | Blood        | Adult PBMC/TH1or2              |
| BF   | Human   | Brain        | 19-23wks., M/F pool of 5       |
| BG   | Human   | Brain        | N/A                            |
| BH   | Human   | Ovary        | PA-1 Teratocarcinoma           |
| BI   | Human   | Kidney       | 19-23wks., M/F pool of 5       |
| BJ   | Human   | Ovary        | PA-1 Teratocarcinoma           |
| BK   | Human   | Retina       | 16-75yrs., pool of 76          |
| BL   | Human   | Testes       | 10-61yrs., pool of 11          |
| BM   | Human   | Muscle       | N/A                            |
| BN   | Human   | Placenta     | 26yrs., 1 specimen             |
| BO   | Human   | Retina       | 16-75yrs., pool of 76          |
| BP   | Human   | Kidney       | 19-23wks., M/F pool of 5       |
| BQ   | Human   | Colon        | Caco-2 Adenocarcinoma Caco2    |

|    |        |               |                                |
|----|--------|---------------|--------------------------------|
| BR | Human  | Kidney        | 19-23wks., M/F pool of 5       |
| BS | Human  | Pituitary     | Adult Pituitary                |
| BT | Human  | Blood         | Adult PBMC                     |
| BU | Human  | Placenta      | 26yrs., 1 specimen             |
| BV | Human  | Brain         | N/A                            |
| BW | Human  | Blood         | Adult PBMC                     |
| BX | Human  | Ovary         | PA-1 Teratocarcinoma           |
| BY | Human  | Blood         | Adult PBMC/TH1or2              |
| BZ | Human  | Kidney        | 19-23wks., M/F pool of 5       |
| C  | Human  | Blood         | PeripheralBloodMononuclearCell |
| CA | Murine | Embryo        | Fetal ES cell embryoid bodies  |
| CB | Human  | Brain         | 19-23wks., M/F pool of 5       |
| CC | Human  | Brain         | N/A                            |
| CD | Human  | Brain         | 19-23wks., M/F pool of 5       |
| CE | Human  | Blood         | Adult lymphocytes+dend. cells  |
| CF | Human  | Placenta      | 26yrs., 1 specimen             |
| CG | Human  | Testes        | 10-61yrs., pool of 11          |
| CH | Human  | Kidney        | 19-23wks., M/F pool of 5       |
| CI | Human  | Brain         | N/A                            |
| CJ | Human  | Brain         | 19-23wks., M/F pool of 5       |
| CK | Human  | Testes        | 10-61yrs., pool of 11          |
| CL | Human  | Retina        | 16-75yrs., pool of 76          |
| CM | Human  | Adult Lung    | Adult Lung                     |
| CN | Human  | Brain         | 19-23wks., M/F pool of 5       |
| CO | Human  | Brain         | N/A                            |
| CP | Human  | SalivaryGland | N/A                            |
| CQ | Human  | Heart         | 13-73yrs., pool of 3           |
| CR | Human  | Testes        | 10-61yrs., pool of 11          |
| CS | Human  | Brain         | 19-23wks., M/F pool of 5       |
| CT | Human  | Brain         | N/A                            |
| CU | Human  | Pineal Gland  | N/A                            |
| CV | Human  | Mammary       | Adult Human Mammary            |
| CW | Human  | Brain         | 19-23wks., M/F pool of 5       |
| CY | Human  | Pineal Gland  | N/A                            |
| CZ | Human  | Testes        | 10-61yrs., pool of 11          |
| D  | Human  | Blood         | PeripheralBloodMononuclearCell |
| DA | Human  | Placenta      | 26yrs., 1 specimen             |
| DB | Human  | Prostate      | Adult Prostate                 |
| DC | Human  | Pineal Gland  | Adult Pineal Gland             |
| DD | Human  | Testes        | 10-61yrs., pool of 11          |
| DE | Human  | Testes        | Adult NCCIT TeratoCA           |
| DF | Human  | Brain         | N/A                            |
| DG | Human  | Placenta      | 26yrs., 1 specimen             |
| DH | Human  | Brain         | 19-23wks., M/F pool of 5       |
| DI | Human  | Testes        | 10-61yrs., pool of 11          |
| DJ | Human  | Placenta      | 26yrs., 1 specimen             |
| DK | Human  | Fetal Kidney2 | Fetal Kidney                   |

|    |        |                |                                   |
|----|--------|----------------|-----------------------------------|
| DL | Human  | Brain          | N/A                               |
| DM | Human  | Brain          | N/A                               |
| DN | Human  | Brain          | 19-23wks., M/F pool of 5          |
| DO | Human  | Testes         | 10-61yrs., pool of 11             |
| DP | Murine | Embryo         | Fetal ES cell embryoid bodies     |
| DQ | Human  | Placenta       | 26yrs., 1 specimen                |
| DR | Human  | Salivary Gland | N/A                               |
| DT | Human  | Brain          | N/A                               |
| DU | Human  | Brain          | 19-23wks., M/F pool of 5          |
| DV | Human  | Pineal Gland   | Adult Pineal Gland                |
| DW | Human  | Brain          | N/A                               |
| DX | Human  | Testes         | 10-61yrs., pool of 11             |
| DY | Human  | Brain          | N/A                               |
| DZ | Human  | Testes         | Adult NCCIT TeratoCA              |
| E  | Human  | Blood          | Peripheral Blood Mononuclear Cell |
| EA | Human  | Brain          | 19-23wks., M/F pool of 5          |
| EB | Human  | Melanoma       | Adult Melanoma                    |
| EC | Human  | Brain          | N/A                               |
| ED | Human  | Placenta       | 26yrs., 1 specimen                |
| EE | Human  | Testes         | 10-61yrs., pool of 11             |
| EF | Human  | Liver          | Adult Liver                       |
| EG | Human  | Pancreas       | Adult HPC-3 Ductal AdenoCA        |
| EH | Human  | Blood          | Peripheral Blood Mononuclear Cell |
| EI | Human  | Brain          | 19-23wks., M/F pool of 5          |
| EJ | Human  | Placenta       | 26yrs., 1 specimen                |
| EK | Human  | Brain          | 19-23wks., M/F pool of 5          |
| EL | Human  | Testes         | 10-61yrs., pool of 11             |
| EM | Human  | Fetal Kidney2  | Fetal Kidney                      |
| EN | Human  | Brain          | 19-23wks., M/F pool of 5          |
| EO | Human  | Adrenal Gland  | Adult Adrenal Gland               |
| EP | Human  | Placenta       | 26yrs., 1 specimen                |
| EQ | Human  | Testes         | 10-61yrs., pool of 11             |
| ER | Human  | Brain          | 19-23wks., M/F pool of 5          |
| ES | Human  | Placenta       | 26yrs., 1 specimen                |
| ET | Human  | Testes         | 10-61yrs., pool of 11             |
| EU | Human  | Kidney         | Adult Kidney                      |
| EV | Human  | Stomach        | Adult Stomach                     |
| EW | Human  | Placenta       | 26yrs., 1 specimen                |
| EX | Human  | Testes         | 10-61yrs., pool of 11             |
| EY | Human  | Brain          | 19-23wks., M/F pool of 5          |
| EZ | Human  | Fetal Kidney2  | Fetal Kidney                      |
| FA | Human  | Brain          | 19-23wks., M/F pool of 5          |
| FB | Human  | Placenta       | 26yrs., 1 specimen                |
| FC | Human  | Testes         | 10-61yrs., pool of 11             |
| FD | Human  | Salivary Gland | N/A                               |
| FE | Human  | Brain          | N/A                               |
| FF | Human  | Testes         | Adult NCCIT TeratoCA              |

|    |         |                |                                |
|----|---------|----------------|--------------------------------|
| FG | Human   | Brain          | N/A                            |
| FH | Human   | Brain          | 19-23wks., M/F pool of 5       |
| FI | Human   | Small Intest   | Adult Small Intestine          |
| FJ | Human   | Lung CA        | Adult Lung CA                  |
| FK | Human   | Kidney         | Adult Kidney                   |
| FM | Human   | Brain          | N/A                            |
| FN | Human   | Brain          | 19-23wks., M/F pool of 5       |
| FO | Human   | Brain          | N/A                            |
| FP | Human   | Placenta       | 26yrs., 1 specimen             |
| FQ | Human   | Testes         | 10-61yrs., pool of 11          |
| FR | Human   | Placenta       | 26yrs., 1 specimen             |
| FS | Human   | Testes         | 10-61yrs., pool of 11          |
| FT | Chicken | Fetal Lung     | Fetal Lung                     |
| FU | Chicken | Limb Bud       | Fetal St. 23 Limb Bud          |
| FV | Human   | Testes         | Adult NCCIT TeratoCA           |
| FW | Human   | Testes         | Adult NCCIT TeratoCA           |
| FX | Human   | Brain          | 19-23wks., M/F pool of 5       |
| FY | Human   | Placenta       | 26yrs., 1 specimen             |
| FZ | Human   | Placenta       | 26yrs., 1 specimen             |
| G  | Human   | Blood          | PeripheralBloodMononuclearCell |
| GA | Human   | Testes         | 10-61yrs., pool of 11          |
| GB | Human   | Placenta       | 26yrs., 1 specimen             |
| GC | Human   | Testes         | 10-61yrs., pool of 11          |
| GD | Human   | Placenta       | 26yrs., 1 specimen             |
| GE | Human   | Brain          | N/A                            |
| GF | Human   | Brain          | 19-23wks., M/F pool of 5       |
| GG | Human   | Fetal Kidney2  | Fetal Kidney                   |
| GH | Human   | Placenta       | 26yrs., 1 specimen             |
| GI | Human   | Retinoblastoma | Adult Retinoblastoma Y79       |
| GJ | Murine  | Spleen         | Adult Spleen                   |
| GK | Human   | Fetal Kidney2  | Fetal Kidney                   |
| GL | Murine  | Lymph Node     | Adult Lymph Node               |
| GM | Human   | Uterus         | N/A                            |
| GN | Human   | Blood          | PeripheralBloodMononuclearCell |
| GO | Human   | Adrenal Gland  | Adult Adrenal Gland            |
| GP | Human   | Ovary          | PA-1 Teratocarcinoma           |
| GQ | Human   | Pineal Gland   | N/A                            |
| GR | Human   | Pancreas       | Adult HPC-3 Ductal AdenoCA     |
| GS | Human   | Retina         | 16-75yrs., pool of 76          |
| GT | Human   | Brain          | N/A                            |
| GU | Human   | Fetal Kidney2  | Fetal Kidney                   |
| GV | Rat     | Retina         | Newborn Retina                 |
| GW | Chicken | Limb Bud       | Fetal St.26 Limb Bud           |
| GX | Human   | Brain          | N/A                            |
| GY | Human   | Testes         | 10-61yrs., pool of 11          |
| GZ | Human   | Brain          | 19-23wks., M/F pool of 5       |
| H  | Human   | Blood          | PeripheralBloodMononuclearCell |

|    |       |                |                                |
|----|-------|----------------|--------------------------------|
| HA | Human | Testes         | Adult NCCIT TeratoCA           |
| HB | Human | Fetal Kidney2  | Fetal Kidney                   |
| HC | Human | Brain          | 19-23wks., M/F pool of 5       |
| HD | Human | Brain          | N/A                            |
| HE | Human | Testes         | 10-61yrs., pool of 11          |
| HF | Human | Brain          | 19-23wks., M/F pool of 5       |
| HG | Human | Fetal Kidney2  | Fetal Kidney                   |
| HH | Human | Brain          | N/A                            |
| HI | Human | Testes         | 10-61yrs., pool of 11          |
| HJ | Human | Brain          | N/A                            |
| HK | Human | Brain          | 19-23wks., M/F pool of 5       |
| HL | Human | Fetal Kidney2  | Fetal Kidney                   |
| HM | Human | Testes         | Adult NCCIT TeratoCA           |
| HN | Human | Fetal Kidney2  | Fetal Kidney                   |
| HO | Human | Brain          | N/A                            |
| HP | Human | Brain          | 19-23wks., M/F pool of 5       |
| HQ | Human | Testes         | 10-61yrs., pool of 11          |
| HR | Human | Brain          | N/A                            |
| HS | Human | Brain          | N/A                            |
| HT | Human | Brain          | 19-23wks., M/F pool of 5       |
| HU | Human | Fetal Kidney2  | Fetal Kidney                   |
| HV | Human | Testes         | 10-61yrs., pool of 11          |
| HW | Human | Brain          | N/A                            |
| HX | Human | Brain Hippoca  | Adult Brain Hippocampus        |
| HY | Human | Trachea        | Adult Trachea                  |
| HZ | Human | Brain Thalamus | Adult Brain Thalamus           |
| I  | Human | Blood          | PeripheralBloodMononuclearCell |
| IA | Human | Thyroid        | Adult Thyroid                  |
| IB | Human | Embryonal CA   | Fetal NT2-D1                   |
| IC | Human | WER1-Rb1 line  | Adult Retinoblastoma           |
| ID | Human | Muscle         | N/A                            |
| IE | Human | Brain          | 19-23wks., M/F pool of 5       |
| IF | Human | Uterus         | N/A                            |
| IG | Human | Testes         | 10-61yrs., pool of 11          |
| IH | Human | Muscle         | N/A                            |
| II | Human | Brain          | N/A                            |
| IJ | Human | Blood          | PeripheralBloodMononuclearCell |
| IK | Human | Retinoblastoma | Adult Retinoblastoma Y79       |
| IL | Human | Retina         | 16-75yrs., pool of 76          |
| IM | Human | Various        | Various                        |
| IN | Human | Prostate       | Adult Prostate                 |
| IO | Human | Brain          | 19-23wks., M/F pool of 5       |
| IP | Human | Fetal Kidney2  | Fetal Kidney                   |
| IQ | Human | Prostate       | Adult Prostate                 |
| IR | Human | Brain Hippoca  | Adult Brain Hippocampus        |
| IS | Human | Trachea        | Adult Trachea                  |
| IT | Human | Brain Thalamu  | Adult Brain Thalamus           |

## SEQUENCE LISTING

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- (ii) TITLE OF INVENTION: SECRETED, EXPRESSED SEQUENCE TAGS
- (iii) NUMBER OF SEQUENCES: 1519
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- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy Disk
  - (B) COMPUTER: IBM PC Compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER:
  - (B) FILING DATE:
  - (C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
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## (2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GGAGATGTTG | AGGTGGCTGC | TGACCTGGG  | TCTCATCTCC | TTGATTTTCT | TTATCTTCTT | 60  |
| CATTGCCGTC | CTCTCTAGGC | TGTCTTTGGC | GAGGAGGGCC | CCTGCGGAAT | CGTGGTCTAT | 120 |
| ATCCCCGATA | CATATCTGTC | CTCACTGGTC | TACCTTGTTT | TCCTGCACCC | TGGTTGTCAG | 180 |
| CACCCTCCAT | CACTTCTCCC | TGCACAGGAG | GGTTGGAATA | CTGTGGTCCA | CGCCCATAGG | 240 |

|   |     |
|---|-----|
| GTCTCCGCAT GTAGTAAGGT GGGAACCTTC GCCTGCGGTA GGGCCGGCGT TGTGGGCCT  | 300 |
| GGCCTTCGGG AGCACTCTCC GATCCCTCGT TCTTTTCCCC ACTCTCACTA TTCTGGTAAT | 360 |
| TTTGCTGGTA ATTGCGTGGA GGAGAACAGG TAGACTCGAG                       | 400 |

## (2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 165 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

|   |     |
|---|-----|
| GAATTAGTTG CCAGCACTTT AAAAATTGGT ATAGTTCACA TAAATATTCT GAATTCAGGC | 60  |
| TTTGGGAAAA GTTGTGGACC CAAGAATACT AGGCCCGCAT TTTCTTACGT CAACATTCTT | 120 |
| TCCAGGATGA TGAATGGACT GTTCTCTTTG GGGCCCTATC TCGAG                 | 165 |

## (2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

|   |     |
|---|-----|
| GAATTCTAGA CCTTCCTCTC CTAATCCCTT CCTTAGGCTC CTGAACCTGT TTGCTCCTAA | 60  |
| ATCTTGTTAA TTCTTTTCT CTGGATTTTG GTTCTTTTG GCTTCCCTT GCCTTCCCT     | 120 |
| TTCTCTGTCT CCAACACTCT TTCCCATGT CTTCTGGCT GTCTCTATGT TCCTCTTCTC   | 180 |
| TTATCCTCAA CTTTCTGTCC ATTGGGGCT CCTCCCCACC TCCACGCCC CAGCCCCCTCC  | 240 |
| CTCCTTGGTC TCCTTTTCGA TATGCCAAC CAATTTTGGG TCGAGTGCAT TCCCTCGAG   | 299 |

## (2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

|   |     |
|---|-----|
| GCGATTGAAT TCTAGACCTG CCTGGATTGC CTTCTGTGT GGTAGACAAA TCACCATTAA  | 60  |
| ATGACTAAGT TTCACTGTTT TATGTGTTAA TGATCCTTAA TAACAAAAAG TTTTAAAGTC | 120 |
| TTAATTTTCT AAGATTATGT AAAGTTAAG AAAGAAATTT TAAGTGAAAA TGATAAAACC  | 180 |
| AAGCAAATGT TTATTAGTTC AATTGTTTTT CTTTTTATCT TGCAGCAACG CACATCTCGA | 240 |
| G   | 241 |

## (2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

```
GAATTCGGCC TTCATGGCCT AGGAAATGAC TTTATTGTGG TTGAATTAGT TAAAGGGTAC      60
TTACATTACG TGTTTGATTG GGGAAATGGT GCTAACCTCA TCAAAGGAAG CTCAAATAAA      120
CCTCTCAATG ACAATCAGTG GCACAACGTG ATGATATCAA GGGACACCAG CAACCTCCAC      180
ACTGTAAAGA TTGACACAAA AATCACAACG CAAATCACCG CCGGAGCCAG GAACCTTAGAC      240
CTCAAGAGTG ACTTATATAT AGGAGGAGTA GCTAAAGAAA CATACAAATC CTTACCAAAA      300
CTTGTCATG  CCAAGAAGG CTTTCAAGGC TGCCTGGCAT CAGTTGATT AAATGGACGG      360
CTCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 430 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

```
GAATTCGGCC TTCATGGCCT ATAAAATTTA AAAATGCTAA GGATCTGGCC CCACAGGCCC      60
CAAAGCTTTC ACAGAGCTCC TCTTAGACAT GAAGATGCCC ATTGGCCTCC TAGGTCCCAG      120
GAGGTGTGGG CAGGACTGCC CTTCCTCCGT TCTCATTGCG GGGCTCCTGA AGGGGGTATC      180
TGAAAGTATG TAAATCTGAT GGGAGGCTCG ATCCTCCTTT TGCTAGCCCC TGAACCTCTGT      240
GGTGGAGTCT GGCTGATGGC CAGGGCCATG TCCTAGAGGG GACTCCCCCTG CAGGAGGCGG      300
GCTCTAAAGG GAGTGGTGTC CCTTTAGGCC AGGGTTCACA GTCGGGGTGG TCTGGAGACT      360
GCAGGACTCA GGGCCTGGGG GTGGCATCAG TCTGGCCAGG CCCTGCGTCA CTTGCACCCA      420
CTGTCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 391 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

```
GGGTGGCTCA TGCCTGTAAT CCCGGCACTT GGGTAGGCCA GGGCAGCAGG ATCGCTTGAG      60
CCCGGGAGTT CGAGACAGCC TGGGCAACAT GGTGAGACCC TGTCTCCATA AAATTTTATA      120
AAAAATTGCC AGGTGTGGTC GTGTGTGCCT GTGAGGCTGA GGTGGGAGGC TCGCTTGAGC      180
CCAGGGGTCA AGGCTGCAGT GAGCCATGAC TGCACGCCAC TGCACCTCCAG CGTGGGTGAC      240
AGAGTCAGAT ACTGTATAAA AAAAAAAGC TAAACAAAA CAAGAAGTAT TATCTTAAGC      300
ATGTTATTTA GAAATATGGA GATAAATAAA AATAACTGAA AGTAGGTCGT TGCTTCTGAG      360
GAGAGAAATT GGGAGTTGGC AAGGTCTCGA G
```

(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 351 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```
GCTTTTGGAG CTGCTAAAAT GCCGGATTAC CTCGGTGCCG ATCAGCGGAA GACCAAAGAG    60
GATGAGAAGG ACGACAAGCC CATCCGAGCT CTGGATGAGG GGGATATTGC CTTGTTGAAA    120
ACTTATGGTC AGAGCACTTA CTCTAGGCAG ATCAAGCAAG TTGAAGATGA CATTGAGCAA    180
CTTCTCAAGA AAATTAATGA GCTCACTGGT ATTAAAGAAT CTGACACTGG CCTGGCCCCA    240
CCAGCACTCT GGGATTGGC TGCAGATAAG CAGACACTCC AGAGTGAACA GCCTTTACAG    300
GTTGCCAGGT GTACAAAGAT AATCAATGCT GATTCCGAGG ACCCACTCGA G          351
```

(2) INFORMATION FOR SEQ ID NO:9:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 354 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

```
GTGATGTGTC ACCCCAAGTG CTCCACGTGC TTGCCAGCCA CCTGCGGCTT GCCTGCTGAA    60
TATGCCACAC ACTTCACCGA GGCCTTCTGC CGTGACAAAA TGAACCTCCC AGGTCTCCAG    120
ACCAAGGAGC CCAGCAGCAG CTTGCACCTG GAAGGGTGGG TGAAGGTGCC CAGGAATAAC    180
AAACGAGGAC AGCAAGGCTG GGACAGGAAG TACATTGTCC TGGAGGGATC AAAAGTCCTC    240
ATTTATGACA ATGAAGCCAG AGAAGCTGGA CAGAGGCCGG TGGAAGAATT TGAGCTGTGC    300
CTTCCGACG GGGATGTATC TATTCATGGT GCCGTTGGTG CTTCCAAACT CGAG          354
```

(2) INFORMATION FOR SEQ ID NO:10:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 432 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

```
GAATTCGGCC TTCATGGNCT AGGAGGAGGA AGAGGAGTAC GAGGATGACG AGGGAGGAGG    60
GGGAAGACGA GGAGGAGGAG GAGGCTGCGG CAGAGGCTGC CGCGGGGGCC AAACATGACG    120
ATGCCCCACG CGAGATGCCT GATGACGCCA AGAAGTAAGG GGGGCAGAGA TGGATGAAGA    180
GAAAGCCAC GAAGAAAAAA GCCTGGTTT GTTTTCCCA GAATATCGAT GGAATTAAAA    240
AGGCTCAGGT TTTTGACCAA AATACAATGT GAATTTATTC TGACATTCCT AAAATAGATT    300
AAATTAAAGC AATTAGATCC TGGCCAGCTC GATTCAAATT TGACTTTCAT TTGAACATA    360
ATAAATATAT CAAAAGGTGT TAAAGAAAAC TGAATTAAAC CAAAATTAT GTTTTCATGG    420
TCTCTCCTCG AG          432
```

(2) INFORMATION FOR SEQ ID NO:11:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

```

CTATTTTACA TGCCCACCAG CATTGTATGG GGCTTCTCAC TTGTCCACAT GCTTGCCTGT      60
GTCATATTTG ACTTAAAGCT TATTTTGACG GGAAACCAAT TTGTCCTTTT TTGGGAAAGG      120
GATGGCACCA CAGATGTGAC GCGGACAATG CATTTTGGGA CCCCTACAGC CTACGAGAAG      180
GAATGCTTCA CATATGTCCT CAAGGGGCCAC ATAGCTGTGA GTGCAGCCGT TTTCCCGACT      240
GGAACCAAAG GTCACCTTCT TGACTCCTTT GCCCGTTCAG CTTTATGGGA TTCAGGCCTA      300
GATTACTTGC ACGGGACTGG ACATGGTGTG GGGTCTTTT TGAATGTCCA TGAAGTCTCT      360
TGCGGCATCA GTTACAAA.C ATTCTCTGAT GAGCCCTTGG AGGCAGGCAT GATTGTCACT      420
GATGAGCCCG GGTACTATGA AGATGGGGCT TTTGGAATTC GCATTGAGAA TGTGTCTCTT      480
GTGGTTCCTG TGAAGACCAA GTATAATTTT AATAACCGGG GAAGCCTGAC CTTTGAACCT      540
CTAACATTGG TTCCAATTCA GACCAAATG ATAGATGTGG ATTCTCTTAC AGACAAAGAG      600
TGCGACTGGC TCAACAATTA CCACCTGACC TGCAGGGATG TGATTGGGAA GGAATTGCAG      660
AAACAGGGCC GCCAGGAAGC TCTCGAG                                     687

```

## (2) INFORMATION FOR SEQ ID NO:12:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

```

GAATTCGGCC TTCATGGCCT AGTCGGTGGG TGCCTGTAGT CCCAGCTACT TGGGAGGCTG      60
AGGGAGGAGA ACTGCTTGAA CCCGGGAGGC AGAGGTTGCA GTGAGCCGAG ATTGTGCCAC      120
TGTACTIONAG CCTGGGCCAC AAAGCAAGAA TCTGTCTCAA AAAAAAAAAA AAGAAAAGAA      180
AAGAATAAAT TTCTTTTCCC CTTGAAGAAG TTGATTTAGG CACAGACTCT GGACTCTGGA      240
TTTCCACAAA TGTCTTATCT AGTCAACTCA AGTATCTGGA CTACAATTTT CTTGAAAGCA      300
AAGCCCATAT ATTAATAATC TTTACTTGTA TATAAATATT CAATAAATCA TTAAGTAAAT      360
GTGTAGAAGA ATTTTATGCT CAATAAGATC CACCCGATCA TGCATTGAA AATTCTCGAG      420

```

## (2) INFORMATION FOR SEQ ID NO:13:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```

GAATTCGGCC TTCATGGCCT AGCACATACT CTGCTTTTCT GTCAACATCC CATTTTGGGG      60
AAAGGAAAAG TCATATTTAT TCCTGCACCC CAGTTTTTTA ACTTGTCTC CCAGTTGTCC      120
CCCTCTTCTC TGGGTGTAAG AAGGGAAATT GGAAAAAATA TTATATATAT ATTCTCCTTT      180
TAATGGTGGG GGGCTACTGG AGAGGAGAGA CAGCAAGTCC ACCCTAACTT GTTACACAGC      240

```

ACATACCACA GGTTCCTGGAA TTCTCATCTT CGAACCTAGA GAAATAGGTG CTATAAACAG 300  
 GGAATTAAGC AAAATGCTGG ATGCTATAGA TCTTTTAATT GTCTTAATTT TTTTCTTATT 360  
 ATTAAACAAC AGGCTCGAG 379

## (2) INFORMATION FOR SEQ ID NO:14:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GTTTCATGGCC TACGGAAAGT CAGCATGGAT AACAGACTGA TGGAACTCTT TCCTGCCAAT 60  
 AAGCAAAGTG TTGAACACTT CACAAAATAT TTTACTGAGG CAGGCTTGAA AGAGCTTTCA 120  
 GAATATGTTC GGAATCAGCA AACCATCGGA GCTCGTAAGG AGCTCCAGAA AGAACTTCAA 180  
 GAACAGATGT CCCGTGGTGA TCCATTTAAG GATATAATTT TATATGTCTA GGAGGAGATG 240  
 AAAAAAACA ACATCCCAGA GCCAGTTGTC ATCGGAATAG TCTGGTCAAG TGTAATGAGC 300  
 ACTGTGGAAT GGAACAAAAA AGAGGAGCTT GTAGCAGAGC AAGCCATCAA GCACTGAAG 360  
 CAATACAGCC CTCTACTTGC TGCCTTTACT ACTCAAGGTC AGTCTGAGCT GACTCTGTGA 420  
 CTGAAGATTC AGGAGTATTG CTATGACAAC ATTCATTTC TGAAGGCCTT CCAGAAAATA 480  
 GTGGTGCTTT TTTATAAAGC TGAAGTCCTG AGCGAGGATG CCCTCGAG 528

## (2) INFORMATION FOR SEQ ID NO:15:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GAATTCGGCC TTCATGGCCT AGCCCAGGCC ACGTACACT CTGCCCACAC TGGTGAGCAG 60  
 GAGGTCTTCC CAGCCCTGT CATTAGGCTG CATTTACTCT TGCTAAATAA AAGTGGGAGT 120  
 GGGGCGTGCG CGTTATCCAT GTATTGCCTT TCAGCTCTAG ATCCCCCTCC CCGCCTGCT 180  
 CTGCAGTCGT GGGTGGGGCC CGTGCGCCGT TTCTCCTTGG TAGCGTGCAC GGTGTTGAAC 240  
 TGGGACACTG GGGAGAAAGG GGCTTTTCATG TCGTTTCCTT CCTGCTCCTG CTGCACAGCT 300  
 GCCAGGAGTG CTCTGCCTGG AGTCTGCAGA CCTCAGAGAG GTCCCAGCAC TGGCTGTGGC 360  
 CTTTCAGGTG TAGGCAGGTG GGCTCTGCTT CCCGATTCCC TGTGAGCGCC CACCCCTCTG 420  
 AAAGAATTTT CTGCTTGCCC TGTGACTGTG CAGACTCTGG CTCGAG 466

## (2) INFORMATION FOR SEQ ID NO:16:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGCGTGATCC | TGGAACGTGC | TCTAGTTCGA | GAGAGTGAGG | 60  |
| GCTTTGAGGA | GCATGTACCA | TCTGATAACT | CTTGAAGATA | CAGAGAGAAA | TCCATCTTTT | 120 |
| CCCAGGTCTC | CTTCACTGAA | AACAAAAATC | TACTTACATA | CACTGTCACC | TTAGCATCAG | 180 |
| AGTCGGATTA | ATGAACTGCG | GAACAAGAGG | TTGTGAGAAT | CTAAGATGGA | ACCTTCTTTT | 240 |
| CTTCTTTCT  | TTTTTTTAA  | ATTTTGATT  | TTCCATCCA  | CACTCGAG   |            | 288 |

## (2) INFORMATION FOR SEQ ID NO:17:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGGCTCTGC | TTATAAATT  | CAAAGTTACA | CTGAAGGATA | 60  |
| CGGTAAAAAC | ACCAGTTTAG | TAACCATTTT | TATGATTGG  | AATACCATGA | TGGGAACATC | 120 |
| TATACTAAGC | ATTCCTTGGG | GCATAAAACA | GGCTGGATTT | ACTACTGGAA | TGTGTGTCAT | 180 |
| CATACTGATG | GGCCTTTTAA | CACTTATTG  | CTGCTACAGA | GTAGTGAAAT | CACGGACTAT | 240 |
| GATGTTTTCA | TTGGATACCA | CTACCTGGGA | ATATCCAGAT | GTCTGCAGAC | ATTATTTCCG | 300 |
| CTCCTTTGGG | CAGTGGTCGA | GTCTCCTCTT | CTCCTTGGTG | TCTCTATTG  | GAGCAATGAT | 360 |
| AGTTTATTGG | GTGCTTATGT | CAAATTTTCT | TTTTAATACT | GGAAAGTTTA | TTTTTAATTT | 420 |
| TATTCATCAC | ATTAATGACA | CAGACACTAT | ACTGAGTACC | AATAATAGCA | ACCCTGGTCT | 480 |
| CGAG       |            |            |            |            |            | 484 |

## (2) INFORMATION FOR SEQ ID NO:18:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

|            |            |            |             |            |            |     |
|------------|------------|------------|-------------|------------|------------|-----|
| GAATTGGCCT | TCATGGCCTA | GGAGATATAC | CTAATGCTAG  | ATGATGAGTT | AGTGGGTGCA | 60  |
| GCGCACCAGC | GTGGCACATG | TATACATATG | TAACCTAACCT | GCACAATGTG | CACATGTACC | 120 |
| CTAAACTTA  | AAGTATATAT | AAAAAAAAAA | GACNTCGCTA  | GTGAGCACGC | TGTATACGAC | 180 |
| ATCGCTAATG | AGGACACCAT | ACAAGGCATC | GCTAACGATG  | ACGCTGTACA | CAACATCACT | 240 |
| AATGATGACA | CCGTATAAGA | CATCGCTAAT | TATGACGCTG  | TATACGACAT | CGCTAATGAC | 300 |
| ACCGTACGAG | GCACGCTAAC | AAGGATGCTG | TACACAACAT  | CGCTAATGAG | GACAGTGTAC | 360 |
| AAGCCATCGC | TAATGAGGAC | ACTGTATATG | ACATTGCTAA  | CGAGGACACT | GTACAAGGCA | 420 |
| TTGCTAACGA | GGACGCTGTA | CACAACATCG | CTAATGACAC  | CATATAAGAC | ATCACCAATG | 480 |
| AGGATGCTGT | ATATGACATC | GCTAATAACA | CCGCTCGAG   |            |            | 519 |

## (2) INFORMATION FOR SEQ ID NO:19:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

|   |     |
|---|-----|
| GCAGCTCTCA TCCTCGTCTC CCCAACACCA TAACGTCCTC ATCCCGCCTC CAACCCACAC | 60  |
| CAGGCCGAAG CCCTCAGAGA GTGTTTTCAT CAGGAACCAC TCTCGAACCT GAAGGTTGAC | 120 |
| TTTAGCGTTT AGCAACCCAG GCGGTGTGT GTGTTTCCCG TTTTGTTCCT TGAGTGGTAG  | 180 |
| CAGTGATCAC CGTAATTCCA TGTAGCCATG TGCTAGCAGA ACCCCTGTGT CCTCACCCTG | 240 |
| GCCCCGTGTA CCCCAGCCGA CGAGTGCCCG GCGGAGTCCC CGCTGCCTTC CCATGGTCCA | 300 |
| GTGAGCTGCC AGGGCATCAC ATGACTCTCA GCTGGGCTCG AG                    | 342 |

## (2) INFORMATION FOR SEQ ID NO:20:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGAGCAGCTC TGAGGTAGAA ATTACAACGA TGAAAAGAGC | 60  |
| ACAACGTACA AAACCAAGAA AGAGTCTGTT GTGTGAAGGG TCATTCGATG AAGAAGCTTC | 120 |
| TGCACAGTCC TTTCAGGAAG TGTTAAGTCA ATGGAGAACC GGAAATCATG ATGACAACAA | 180 |
| GAAACAGAAT TTACATGCAG CAGTAAAAGA CTCATTGGAA GAATGCGAAG TACAGACTAA | 240 |
| TCTGAAAATT TGGAGAGAAC CACTTAATAT TGAACCTAAA GAAGACATTC TATCCTATAT | 300 |
| GGAAAATTA TGGCTTAAAA AACACAGGAG AACTCCACAA GAGCAACTTT TTAAATGCT   | 360 |
| ACCAGATACG TTCCACATC CACATGAAAC CACTGGTGAT GCACAGTGTT CTCAAAATGA  | 420 |
| AAACGATGAA GATAGTGATG GTGAGGAGAC CAAAGTACAA CACACAGCTC TTTTATTGCC | 480 |
| AGTAGAAACA TTAAACATAG AGAGACCTGA ACCATCTCTA AAGATAGTCG AACTGGATGA | 540 |
| TACTTATGAA GAGGAATTTG AAGAAGCAGA ACATCTCGAG                       | 580 |

## (2) INFORMATION FOR SEQ ID NO:21:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGAAAGATCT AATTATCATG GACCTGCGAC AGTTTCTTAT | 60  |
| GTGCCTGTCC CTGTGCACAG CCTTTGCCTT GAGCAAAACC ACAGAAAAGA AGGACCGTGT | 120 |
| ACATCATGAG CCTCAGCTCA GTGACAAGGT TCACAATGAT GCTCAGAGTT TTGATTATGA | 180 |
| CCATGATGCC TTCTTGGGTG CTGAAGAAGC AAAGACCTTT GATCAGTTGA CACCAGAAGA | 240 |
| GAGCAAGGAA AGGTTTGAA AGATTGTAAG TAAATAGAT GCGCACAAGG ATCGGCTCGA   | 300 |
| G   | 301 |

## (2) INFORMATION FOR SEQ ID NO:22:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

```
GAATTCGGCC TTCATGGCCT AAAAAAAGGA TGGTGTGTTG AGACCAGAAG CAGCAGCAGT    60
CCTCGACATC AACTACAAC TCCCTTCGCA CAGTGCATAC CCTCTGATAT ACTGAACCCA    120
ACGCCTATCC TCCAGCCCC TAAGAACTAG AGAGGGAGCC TCACAACATT CCAATTAAAT    180
CCTTCAGAAA ATTCATTACT CTTCAAAGTT GTCTGTGGTT TTGTGACAAC GATATGACTA    240
GGTGCAAAAT GGCTTGCAAC TAATTAACAA ACATAGAAGC ATCCAACAAA CATATACGTG    300
CACAATCTGA GGATTAGGG ATGAAGCTCG AG                                     332
```

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

```
GAATTCGGCC TTCATGGCCT ACCAGCCTGG GCGACAGAGC AAGACTCAGT CTCAAAACAA    60
AACAAAACAA AACAAAAGA GAAGGCTATT ATTAACATTC GAGATAATGT GCCAGACTGC    120
TTCCATGTAT TTTCAATTAT CTGTCCCAA TCTGGTGAAG TGGGTATCTG CACAGCTTTC    180
TCTAGATTGA ACAACTAGTA AGGGGGCTGG CCCTGGAGAA AGTTACCTCC TGCCTCGAG    239
```

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```
GAATTCGGCC TTCATGGCCT ACTTTTATAT TGTATTATTT GTAAAGCATC TTTTCTTCAA    60
TTCTTGTTGG CATTCTGGGC CAAAATATTT CAGGTTGGTT CGGTGTGGAG TTAAGAAAAG    120
CAGGCGTTTT AGTGGAGAAA TGGGGAACAG CATCAAGAAA GGCTTTTTTC CTTTTTCTT    180
TTTTTTTGG AGACAGAGTC TTGCCCTGTC ACCCAGGCTG GAGTCAATG GTCTCGAG    238
```

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```
GAATTCGGCC TTCATGGCCT AGATGGATTT CTTAATTGAA GTACTTTTAT AATCACAGTG    60
```

ACTGAACAAA ATATTTTCAA AGACATTTGT CATTCTTAA AGCCAAGATT TTAAAGACTA 120  
 ATGTCCTTCC TGAGGGTTAC TTTACTATAC TGTGTATGGT GTATAGCCAC AGAAAGTCAG 180  
 TCTGATAAAT TTTCAATGTG TAAAGTGTGAT GCATTCAACC CAGATCTCGA G 231

## (2) INFORMATION FOR SEQ ID NO:26:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 307 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

GAATTCGGCC TTCATGGCCT ACACAGAGTA TATTTATAGC TATCTCAGGG TCCTTGTCCA 60  
 ATTGTCTGTG TCATTCTCTC ATCTGCTTCT ACTGATTTT TCTGCTTCTG TTTACTCTTC 120  
 ATTTTGGACC TATTTCCCT TATTGGGTGC TTTGCATACA ATTTGTTGGG ACTGGATCTT 180  
 TGCTAGTCCT TTAAATGTTT TTAAGCTTTG TTTGGGATG CAGTTAGGTG ACTCAGAAAC 240  
 AATCAGAAAC AATTGATCC TTTTATGTCT CTTAAGCTTT GTTATAGGCA GGACCAGAGC 300  
 TCTCGAG 307

## (2) INFORMATION FOR SEQ ID NO:27:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 253 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GAATTCGGCC TTCATGGCCT ACAATAATAG CCTCCACCT GGTCTTCCTT CTTCAGTCTC 60  
 TTCAGTCTTT CCCAAGCTC TTGAATCCTA CATGAACCCA TGCCTCGGTC AAAATATTAC 120  
 AGGCTGCAGC CAATCTTCAA GTGGCATAA GGCCAAACAT CCATTTATAA TATGGTTGGA 180  
 ATTCCTAACA CATTTTATCA TAGATCTAAT GCCATACAAT AGGTGGAGGT TAGATCCTCA 240  
 CGCAACTCTC GAG 253

## (2) INFORMATION FOR SEQ ID NO:28:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 254 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GAATTCGGCC TTCATGGCCT ACAGAGAACT TGTGTTCCGG TTTATTGAAG TTCAGACACT 60  
 TCTCCTCGCT CCATTCTGTC CACATTGTG TGAGCACATC TGGACACTCC TGGGAAAGCC 120  
 TGAATCAATT ATGAATGCTT CATGGCCTGT GGCAGGTCCT GTTAATGAAG TTTTAATACA 180  
 CTCCTCACAG TATCTTATGG AAGTAACACA TGACCTTAGA CTACGACTCA AGAACTATAT 240  
 GATGCCAGCT CGAG 254

## (2) INFORMATION FOR SEQ ID NO:29:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

```

GAATTCGGCC TTCATGGCCT ACGAGAAGGA GTGGAAGAGT AAGCAGACTA GGAAATACA      60
GTACAACCAT CAGGCAGCAT TACAGACCCA CTTAAGGTTT GTGGCCATGT GTGGTTGTGT      120
GGTTTTTTT CTGGCCATGC TCAGTTACAT AGGGGCAAGT GCAAAAAAAA CCCCAGAGTT      180
TGTTTAACT AGAGCTCTGG TTTGCCAA C                                     211

```

## (2) INFORMATION FOR SEQ ID NO:30:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

```

GAATTCGGCC TTCATGGCCT AGGATCAGGT TCGTCCTTTA GTGTTGTGTA TGTTATCAT      60
TTGTTTGGAG GTTAGTTTGA TTAGTCATTG TTGGGTGGTG ATTAGTCGGT TGTTGATGAG      120
ATATTTGGAG GTGGGGATCA ATATAGGGGG AAATAGAATG ATCAGTACTG CGGCGGGTAG      180
GCCTAGGATT GTGGGGGCAA TGAATGAAGC GAACAGATTT TCGTTCATTT TGTTCTCAG      240
GGTTTGTTAT AATTTTTTAT TTTATGGGC TTTGGTGAGG GAAGTAGGTG GTGGAGCACA      300
GGCACTGCAG GTCAATGGAG GTGGACTACA GGGACTACAG GTCAATGGAG GTGGAGCACA      360
GGGACTAAAG GTCAATGGAG GTGGGGCACA GGGACTACAC GTCAGTGGAG GTGGAGTCAC      420
AGGGACTACA GGTCACTGGA GGTGGAGCAC AGAGACTACA GGTCACTGGA GGTGGGGCAC      480
AGAGACTACA GGTCACTGGA GGTGGAGCAC AGAGACCACA G                                     521

```

## (2) INFORMATION FOR SEQ ID NO:31:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

```

GAATTCGGCC TTCATGGCCT AAAATTCCT CTAAGTACTG ATTTAGCTGC ATGTATAAG      60
TATATGCTTC CATTTTCATT CATTTCCAAA TATTTCTAA TTCTCTTGC AATTTTTTTT      120
TCAGGAATTC GGGCCTTGCT GTGTTGCCCA GGCTGGAGAG CAGTGCCACT ATCAGAGCTC      180
ACTATAAACT CAAACTCCTG GGCTCAAGCA ACCCTCCAC CTCCAAGTC CCCTCGAC       238

```

## (2) INFORMATION FOR SEQ ID NO:32:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

```
GGTTTCTTAA AAAAAAAAAA AAAAGGAATT TGATCCAGAG CAATTTTCT CAATTAAAT      60
TTGTGATTAC ATTTCTGAGT TTCCATGGCA GAGTTGTGAG TGGGGCTGTG ATATAATTTA      120
ACTTCTCCTA AATTGCTGAC ACCGATAACC CTATAAATTA ACAGATGGCG GAGGGAAATC      180
TCCTGGCTTC TTCCTGGCTA GTTTTTTTTA ATGGTCTGAT TTTTGAATA GGGGTTTGA      240
GTCCAGCCG ACTCGAG                                         257
```

(2) INFORMATION FOR SEQ ID NO:33:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 251 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

```
GAATTCGGCC TTCATGGCCT AAAGACTTAC GTTATATTTT CATATACTCC TTCCCACTCT      60
TAGTGTGTTG TCAATATACA TTTGTTTT CATGTAAAAA CACCACAGTA TATTGTTCTT      120
AATTTGCTT TTAATAGTAA ACTGTCTTAT AACAAATTAT GAAAATGGAA AAAACATGT      180
CTTTCTTATT TGCCCTCATA TTTATCCATT TAGGCACTCT TCCTTTTCC CTTTCATTCC      240
AGGTTCTCGA G                                         251
```

(2) INFORMATION FOR SEQ ID NO:34:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 245 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

```
GAATTCGGCC TTCATGGCCT ACTAACATTT ATGAAAATTA TTTGTAAATA AAATAAGAGG      60
CATTGAGATT AAAATTGGAG ATAAAGTTGC TGATGTGTTG TTTTCCTGAA GTATTTTTTT      120
TCTTAATTCT GATCTTTGTT TCCCAATACA ATCACACTCA CACCCTTGCA GTTCAGTTTC      180
CTGACGACTC TCTAGTGTGC CAGATCTGTG TTTCTATGTC AGTGATCTGT TCCCACATCTC      240
TCGAG                                         245
```

(2) INFORMATION FOR SEQ ID NO:35:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 383 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```
GAATTCGCTT CATGGCCTAC CGAGAAATGG GTGTGATTGC TGCCATGAGA GATGGTTTGT 60
GTTTCATCAA GTGTGTGGAT CGTGATGTTT GTATGTTCTT CCACTTCAGT GAAATTCCTGG 120
ATGGGAACCA GCTCCATATT GCAGATGAAG TAGAGTTTAC TGTGGTTCCT GATATGCTCT 180
CTGCTCAAAG AAATCATGCT ATTAGGATTA AAAAATTCC CAAGGGCACG GTTTCATTTT 240
ATTCCCATTC AGATCACCGT TTTCTGGGCA CGGTAGAAAA AGAAGCCACT TTTTCCAATC 300
CTAAAACCAC TAGCCCAAT AAAGGCAAAG AGAAGGAGGC TGAGGATGGC ATTATTGCTT 360
ATGATGACTG TGGGGGTCTC GAG 383
```

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

```
GAATTCGGCC TTCATGGCCT ACTGCCGCTC CTGGTGCTGC TTGTGTGCTC GTTTGGTGCG 60
GACCTGGTAC CTCTTTGTG AAGCGGCAGC TGAGGAGACT CCGGCGCTCG CCATGGCCGA 120
CGAAAAGCTC GAG 133
```

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

```
GAATTCGGCC TTCATGGCCT AAGGTAGTCT AGGCTCATCT TCATGAGGGA ACTGAGGTCT 60
TGGGGGGTGG GGGTTACCCA AATAGGTTCA CAGAAGAACC AGAAATAAAA CCTGCCTTTC 120
TAGACTGTAA GTCTTGTGAT TGTCATCTAA ATGGTTGTCT CTATACAGCA ACTCATCTCT 180
AGAACTGAAA ATAAGTTTAA ATCCCTCCTC CATCCCCAAT AATTCAAGCT GCATTTCAGA 240
GAAAACCAGG ACTTTGGAAT CAGACAGCAA CTCGAG 276
```

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

```

GAATTTGTGC TCTTAGAGTA GGAGTTGGAA CTATAGGACT TGAAGGCAAG AGCAGGTATC      60
TTATCAAGGA TCTACTCACT CAGTTTCCCT AAAGCTCTCT CTCCAGATCG GATTCAACCG      120
CACATCATGA CAGATGTTCC GGCTACATTT ACCCAGGCTG AGTGTAAATGG GGATAAACCA      180
CCTGAAAACG GTCAACAAAC AATCACTAAA ATCAGTGAGG AATTGACTGA TGTGGACAGC      240
CCCCTGCCAC ACTACAGGGT AGAACCCAGT CTGGAAGGTG CACTCACCAA AGGAAGTCAG      300
GAGGAAAGAA GAAAATTACA AGGGAACAGA CTCGAG                                336

```

## (2) INFORMATION FOR SEQ ID NO:39:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```

GAATTCGGCC TTCATGGCCT AGTCGGAGAA GGACATCCAG GATCTGAAGT TTGGGGTCGA      60
GCAGGATGTT GATATGGTGT TTGCGTCATT CATCCGCAAG GCATCTGATG TCCATGAAGT      120
TAGGAAGGTC CTGGGAGAGA AGGGAAGAA CATCAAGATT ATCAGCAAAA TCGAGAATCA      180
TGAGGGGGTT CGGAGGTTTG ATGAAATCCT GGAGGCCAGT GATGGGATCA TGGTGGCTCG      240
TGGTGATCTA GGCATTGAGA TTCCTGCAGA GAAGGTCTTC CTTGCTCAGA AGATGATGAT      300
TGGACGGTGC AACCGAGCTG GGAAGCCTGT CATCTGTGCT ACTCAGATGC TGGAGAGCAT      360
GATCAAGAAG CCCC GCCCA CTCGA                                385

```

## (2) INFORMATION FOR SEQ ID NO:40:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```

GAATTCGGCC TTGCTAAAAA AAAAAAAAAA GAGGCAAGTA ATGTAATATC CCCCACCTTT      60
GGTTTTCTTA TCTATAAATA CTGATTAAAA AAAAAAGTAC ACTGTCTGCC TTATAAGCTA      120
AAATGAGTGA ATACAGGCAA AATGCCTTAC ATTTTACTTT ACATTTACTA AGCACCACAGA      180
AAATGTAAAC TATGATGACA ATTATGATGA TGATGATATT GATATTTTCA AGGAGGCGCG      240
TCGAG                                245

```

## (2) INFORMATION FOR SEQ ID NO:41:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```

GAATTCGGCC TTCATGGCCT AAATAAAGAT GATTTTGTG CTTAGCAGTT TAAGGTATAT      60
GGCTGCATAT GCAAACTCT TTCCCAATC AGTCGCTACT TTTACTTCTG CCCTTTCTAT      120

```

CCATCGTCTT CATTTTGTGT GTACAGTGCT GTGTGTAAGC TTATCAGTGT GTTTTTTAT 180  
 TTGTATCAGT CATGAAAGTC CTGTTAGGTA TCCAGAGTTC TATTTATCTA GCTGTACAGA 240  
 TCTCGAG 247

## (2) INFORMATION FOR SEQ ID NO:42:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GGATATGGTA ACTGAGAACC ATTTTCTAGT TGAGATAACT CATGTACAGG GGGGGTCACA 60  
 TGACTCAACA ACACACAGAG CACAGAAGAG AACCAACAAT CTCGAG 106

## (2) INFORMATION FOR SEQ ID NO:43:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GCGTATTTC AAGTGTATGT ATTTCTAAAG ATAGATTTTT TAAAAACAAA AAATCTTAAT 60  
 TTAGATGATA AGCGATTTTT ACCTTTTTTT TTTTTCAAA GCAACTTGAT CCTGTAGTT 120  
 TTGGCATCTT AAGTGGAAAT GTTCATGCAG TTTTGCTGGA TCTTCGCTAT GGCAGTAAAA 180  
 TGCAATACAG CACTGTGGTT AAGAGTGCAG AACGGAGTCA GTCAGCCTGA ACTCGAG 237

## (2) INFORMATION FOR SEQ ID NO:44:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGCC TTCATGGCCT AGGGAGTNGG 60  
 TGTGTCTGTG CATTTATTGG GATCATGGAA GGTGTAGAT GTGTATTCT AACTGTAGAT 120  
 AATGGAGGAC ACATATTGG GGAGTTTGA GAGGATGTGT ATGTGTGTGT GTGTGCAGTG 180  
 TGGTATTCT CTATGTTTGG GTGGGTGGGG TATGTATCCA TCAAAATATC TCAGATTATC 240  
 TGATGTAAGA AAATAATTCT GCATCTCAGT GACTTCCAAC AAGGTAGGTT TCTCATGTAT 300  
 GTTATGTGTC CTCCATTGGT TGGCTTTGAT CAGTTACTGG TCCTGTGCCT TGGATCCAGA 360  
 TGGATGAAGC GGCCTCATTT GGGACAGGAC TAGAAGGACT TCTTCTGCTC AGAGTCATAC 420  
 ATGGCATTTT TGATCACATT TCATTGCCA TAACAAGTCA TGTGGCCATA CTCGAG 476

## (2) INFORMATION FOR SEQ ID NO:45:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 358 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

```
GAATTCGGCC TTCATGGCCT AGGCAAATC TGCTGGACTT AACTTCATCA ATGTAGTGGG    60
CTCTGTTTGT GGGGCCCAGG CTTTGATGAG TGGTTCAAAC CCCATGCTGG GCTGTAACAC    120
TGGTGCCATA ACTCCTGCAG GAATAAACCT GAGCGGCCTT CTACCCCTAG GAGGTCTGCT    180
ACCAAATGCA CTGCCCAGTG CAATGCAGGC AGCTTCTCAA GCAGGTGTTT CATTGGTTT    240
AAAAAATACT TCAAGTCTCA GGCCCTTAAA TCTACTCCAG CTTCCAGGTG GTTCACTTAT    300
TTTAACTACT CTGCAGCAGC AGCAACAGCA GCTCTCCAG TTTACACCAC AACTCGAG    358
```

(2) INFORMATION FOR SEQ ID NO:46:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 353 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

```
GAATTCGGCC TTCATGGCCT AATCATTTTG ACTTTCAGTG CTTTCAATGA CCAGTGGCCT    60
CCAGGGATAA AGCAACTGCT TGGTTTGAG GCGTCTCTCT GCGCTGCTGA GCCATCAGCC    120
TCCAATACGC CAATGCCCAT AGATGCTAGT TACAGCCCTG CTTCTCTCTA CATAGGGTTC    180
TGTCATCACT GAGTCTCACC ATTTCCTCT CCCCAGTGTC TTTATTATGT GACACACACA    240
CACGGCACTA TGTTTAAAAA AGCGTGCTCA CTGGCAACCT CTTGGCGTTG TGTGTTTATT    300
CTGTGTTTGG TATTGGTGGT ATCTTGGGGT CGACCGAAAG AGTCAACCTC GAG    353
```

(2) INFORMATION FOR SEQ ID NO:47:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 456 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

```
GAATTCGGCC TTCATGGCCT AGGGAGCTAC CAGATGCTGA AGAAAGGGCC CTGGCAGACT    60
GGGTTCAAAC TCAGCCATTG TCAGCTTGGT AACCTTGACC AAGTGCTCTC CCCTCTGTGA    120
GCCTCAGTTT TCTCAATAGT AAGAGGGGAT AACACACTTA CCTCTCATAG CTGTGGACAT    180
GGAGGTGAAA GTGCCGCATA CACTGTAAAG TGTTATATAC GTGTAAGAGA AAAAATCGGG    240
CCAGAGGCTG GGCTTGTGTT AATTGATTCA GGAAATTAC CAGAGGCCCC CTAGATGCAA    300
CGTCCTTTGG GTGTCTGGCA GTGGGCACAA AGATGAACAA AACAGTGCCC CACCCTCACC    360
CCGTCAACCG TCAGTGCAGC AGTGGGCTGG GTGCTTGCGT CCCACAGTGA GGAAGGCAGA    420
AGGGGTCCCT GCCCTCAAAG GAGGACGATA CTCGAG    456
```

(2) INFORMATION FOR SEQ ID NO:48:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 509 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

```
GAATTCGGCC TTCATGGCCT AGCTGCCCCG CAGCACTTAC CGGAGCGACC ATGAGGGTGA      60
CGATTTGAAG CACACACAGG CTTCCTGCGCA CCTCCTTTAA ACCGCCGCTG GCTTGCCAGG      120
GACAGACGGC GCGGTTGGCT CCCCAAAATT CCGACTGATA CGCGCCTCGG CGAGCGAAAG      180
CAAACGCGGG ATACTCTCGC GTTCCTGATT GGCTGCAGTT GGAATTGATC ACACCTTTTC      240
AGTTGTACTT CAATCCTGAA TTAATCTTTA AACACTTTCA AATATGGAGA TTAATCACCA      300
ACTTCTTATT TTTTGGGCCA GTTGGATTCA ATTTTATT TAACATGATT TTCTATATC      360
GTTACTGTCG AATGCTAGAA GAAGGCTCTT TCCGAGGTCG GACAGCAGAC TTGTATTTA      420
TGTTCTTTT TGGTGGATTC TTAATGACCC TTTTGGTCT GTTTGTGAGC TTAGTTTCT      480
TGGGCCAGGC CTTTACAATA ATGCTCGAG                                     509
```

(2) INFORMATION FOR SEQ ID NO:49:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 467 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

```
GAATTCGGCC TTCATGGCCT AAAGCAAGTG ATTTTCTTTT TTTTAAAGAC AGGGTCTCAC      60
TTGGTCACCC AGGCTGGAGT ACAGTGACAT CATCACGGCT CACTGCAACC TTCGCCCTCTT      120
GGGCTCAAGT GATTCCCCCA TCCCCACCC CCCTTCTCAC CCCCAGATTG GACTATAGGC      180
GTGTACCACC ACGCCTGGCA GAGACCGGGT TTGCGCGTTG CCCAAGCTGA TCTCGAACTC      240
CTGAGCTCAA GCGATCTGCC CGTCTCAGCC TCCCCTAAGC AAGCATTTTT AAGTTTCTAT      300
GCTGTTAAT TTTTTTAAAC TGATTAATTT ATTTGCATTG TGTGGTCATG GAATATGTTT      360
TTATGATATT GGTGTTTGA GATTGGTGA GTCTTCTTT GTAACCTAGT TAAACCATTC      420
CATATCTTTT TAAAAGGATG TATATTCCTT ATCTGTTAGG GCTCGAG                                     467
```

(2) INFORMATION FOR SEQ ID NO:50:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 168 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

```
GAATTCGGCC TTCATGGCAG AGTGGAAGGG GTTGTAATA TTAGGAGAGA GATAATTCTT      60
AGTGCAATTC TCTGAGGATG AAGCATGAGA TGAATCCATG GCACGAATGG AACAGCTGGG      120
GAAAGCAGGT CAGAATGGAT ATGGATATAA ATACTGTGAG TTCTCGAG                                     168
```

(2) INFORMATION FOR SEQ ID NO:51:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 228 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

```
GAAGTAAATT ATTACGATTT CCTTAGGTGG TTAATAAATT ACCATTATTT TCTCTATTTT      60
ACAGATCACG AAATGATAAG TAACTTACCG AAAGTTACAT TATTTAAGTT AATCAAATGT      120
TTATTGATTG CCAGACTTTT TTCTAGGCTT AAGCAAATGT TGGAAAATAC TTCTCTGAGC      180
TTTCAAAAAT GTTATTTCTA CTTGTCAGTG CTGCAGGAGT CTCTCGAG      228
```

(2) INFORMATION FOR SEQ ID NO:52:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 247 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

```
GCAGAGTCAA TAGATACTTT AAATTGAAGT AAAGAATTAA AAAAGGAAGT GGATAGTTTG      60
GGTATTAGTT TAGCTAGAAA TACAAAGAAA CTTGACTTCT AGGGCAGTAC AAATTCAAGC      120
CTTCCACAAA CAAACAGTTG AGAGTATGTT TATCTTCTTA AAATGTGTGG GTGCCTTCCC      180
ACCACTTCAC CTGCTCCTCA CTGGTGCTTT GTCCCCTCCC TACTACCATT CCTGTCCCGG      240
TCTCGAG      247
```

(2) INFORMATION FOR SEQ ID NO:53:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

```
GGCCAAAACA AAGCTTATAA AGGTTCTGTC TCCCAACGTA ATTACCTCCA ATCGGCATTT      60
AAAGACATCC GCATTGCTTA CAGCACATCC TAGCCTCATG CTGCCCCAAG GATGGACTCG      120
AAATGAAC TA TTTCCAGAGC GACTTATTCA GGCATTCTGT GGAGCCTCCG TTGCCCTGTC      180
CATCACCGGA GCTTTTGTA TTGCAGCTAT GCCATTGGCC TCCGGCAACC TCGAG      235
```

(2) INFORMATION FOR SEQ ID NO:54:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 231 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

```

GAATTCGCCT TCGTGGCCTA AAAAGAAAAA ATCTAAGGTA GATTGTGCCT TTTGTGCCTT      60
TCCTCTGCTC AAGACCTTTC AGTGGCTTCC CACTTCACTC AGTAAAAGGC AAAAAGTCCT      120
TTTAATAACC TACAAGGCAT TATGTTACCC ACATTGTCCC TGCTCCCCTA CATGTACTC      180
AAGTCTATGA TCTTTTACC ATTCTTGTA CAAAGGATTT TCACTGGCTG G      231

```

## (2) INFORMATION FOR SEQ ID NO:55:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

```

GAATTCGGCC TTCATGGCCT AGAAATATTT TCCTACAAGA GTACTGAATT TCAGGAAATG      60
GGATAGAGCT TCTAACCAGT GTATTCCGTC AAGTAAGATA ATAACAGCTG ACCTGCCAAC      120
AGCATTACAG GGAGATTCTT TGCTCAGCTA ACACATTCTT GTTTTCAAA ATTGATGCTT      180
AATGTAGCT GTTATTCTAA TTTGTGACAT GGAACCTAAT CATGCTTCAA TCCTTGATAG      240
AGCAAACTC AGAACAGGTT ATGTAAAAAT ATAGTCTGGC TTTAGAATTT GTTAATTCAC      300
CTGCTTGGCC ACAGAAAATG GAGACTCGAG      330

```

## (2) INFORMATION FOR SEQ ID NO:56:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 230 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

```

GAATTCTAGA CCTGCCTCGA GATCTGAACAT ATAATCTTTT CCATTCTATC TAGCTCCCAT      60
CCTAAGTCCT CTCCTCCTAA CGTGGAACTC TCCTAAAATC TTCTCCTTAT ACTAGGGTTC      120
GAGACATGAG GCTGTCTTTT TGGGCCTTTT GCGTTGTCAC AGTCCCAGAC CACGGAACAT      180
TCTCTCTTCC CCAGGACAGG ACATTCTCTC TTCCCCAGCG CTCCTCGAG      230

```

## (2) INFORMATION FOR SEQ ID NO:57:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 416 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

```

GAATTCGGCC TTCATGGCCT AAAGGGAAAG TGGGAATATA CACAATGCAN AACTAGCCA      60
CATGCAATCA TGGGAGAACA GAGCCTACTT AAAAATCANA CCCAAGCTTT GCTTCAGAAA      120
TAAGTGGAGT TGAACCCATT CGATCATTTA CGCATGACTT TGCAAAGGTT CTCTGGAGGG      180

```

```

GGAAGAGGAT CAACCTTCTC TCATACCGCA CAGCAAGGGA ACCAAAGTAA TATAAATCAC      240
TCTTAAAAAT GTCATGTTAC TTTAAGAATA AGCCATACTG CTGGCACCTA GAATATTTTT      300
GTGGGTCCCC ATCTCTGGCT TTTCTTGTC AAATGGCCCC CAGGCTAAGA GGCAGCTGCT      360
CACATCCCTG CAACAAACAT GTTCTTTCCT TTCTGCATAG CTTCCATT CTGAG      416

```

## (2) INFORMATION FOR SEQ ID NO:58:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

```

GAATTCGGCT TCATGGCCTA CTAGACCTGC TCAGTCGTC CTAATGAATA AAAATCAAGT      60
GCCAAAGCTT CAGCCCCAGA TAACTATGAT TCCTCCTAGT GCACAACCAC CACGCACTCA      120
AACACCACCT CTGGGACAGA CACCTCAGCT TGGTCTCAA ACTAATCCAC CACTTATCCA      180
GGAAAAGCCT GCCAAGACCA GCAAAAAGCC ACCACCGTCA AAGGAAGAAC TCCTTAAACT      240
AACTGAAACT GTGTGACTG AATATCTAAA TAGTGGAAAG TCACTCGAG      289

```

## (2) INFORMATION FOR SEQ ID NO:59:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

```

GAATTCGGCC TTCATGGCCT AATTGAGGC CTGGGTGGAA CTGACAGGTG GAGTTTGAAG      60
GCACATCTGC TAGCTCACAT AGGAAACAGA ATCTCCCAGG GAAAAGACAT AGGACCTCTG      120
ACTCTAACTG AGGTTCTGGA TTATTATGAG AGATTTCAG AAATGGTCTA ATGGTGTGG      180
CTTGCTCCAT ACCATAGATT TTAAGAGACA GTAGAGCTTC TGCGATGAGA TTCCCCATA      240
AAATAATTAT GGATCTGCAC TGGCAAGCTG GTCTTGGCTC CAAAGACCAA GAGTTGGTTT      300
GTGGTGCTGA TTCTGAACCC TTGCGATGCA ACTGTCTGGT AGTAAATGG CTTGTATGG      360
TAAGAAAGCT TTAATCCTCG AG      382

```

## (2) INFORMATION FOR SEQ ID NO:60:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 196 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

```

AAAAAAAAC CAAACCCTAT TATTTCATTG ACAGATTGTC TTAGAGTTGA TAGCATTAA      60
TAATTGAGTA AGTACAGTCC TTCCTGTGTC CCAACGTGCC CTATTTTTC TTTCTTCTCT      120
ACTTTTGCAT ATGCATTTTC CCTTTTCTT GTTCTTGGT GAATTCCTAA ACCTTTTTTT      180
TCAAAATCAC CTCGAG      196

```

## (2) INFORMATION FOR SEQ ID NO:61:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```

GAATTCGGCC TTCATGGCCT AACCACATTT TTCTAATTAG TGTTC TAGAC TGGCTAGATA      60
AATCAACAAT GAATCAACAG TCTTTAAGCA CATATACAGG TATGATAACT CTGTAGTTAA      120
CTCAAATCCT TGTGCTATGT ATTATTTTGC TGCCTAAGTC AGAATTCAGG AAGCTACCCA      180
CCCAATCAGT CTTTAGCTGT TTTATTTTCAG TAACAAGTTT ATGCAGAACC TTCCATATCT      240
CTCATAAAAC CAGAGCATT C ATAGAACCAG AAACCTCTCGA G                        281

```

## (2) INFORMATION FOR SEQ ID NO:62:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```

GAATTCGGCC TTCATGGCCT AAAAGATTG AGCATTTCAA AATTTTAAAC ATAAAAGCAT      60
AAACGTAGAT AAAATGAAGG TGTACTATGA TATCTTCAGT TTTATCAGAA ATGATGTAAA      120
AATTACAACC TCTTTAAAAA GTAGTGTTAA TCATTAAGTT AGAAAAATATA TAGCTGGGCA      180
TGGTGGCAGA TGCCTGTAAT CCCAGCTACA TGGGAAGGTG AGGTGGGAGA ATCGCTTGAA      240
CCCAGGCAGT GGAGGATGCA GTGAGCCAAG ATCATGCCAC TGCACCCCGAG CCTGGGTGAC      300
AGAACAAGAC TCCATNTCAA GGAAAAAATA AAAGAAAAAT ATATATATGA ACTTCAGAAT      360
CTGAGGTCAT ATATAGACAG GTCTTCCCCC CGTCTCTCGAG                        400

```

## (2) INFORMATION FOR SEQ ID NO:63:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```

GAAACCATAG TGGCAGATTT GTAGCAAAAA GAATCTTTGT AACCTTCCCT TTAGATGTCC      60
TGTGTTATGG CTTGGTTTTT CTCAAAGATC ATAGATTGCA GTGTTTATCT CAACTCAGTA      120
TTTCCTTTGA AAATGAACT TTTCTCTATA TTTTCCTTTC CCCCATGCAA ACTTTTGTAT      180
TGTTTTTCTG AAATCATAAT TCATTGACT TACCAGTTAA TATTGATACA GGTCTTGCAT      240
GTTATGAAGT GCATTGTGTA CATTATCTTG TTTAATTTTC ACAACACTCT TCTCGAG      297

```

## (2) INFORMATION FOR SEQ ID NO:64:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

```
GGTCGCAGAA GAGTGTGAGA ACAATCAGTT AAAGAAGCTC AAAGAAATCT GTGAGAAAGA      60
AAAGAAAGAA TTAAGAAAGA AAATGGATAA AAAGAGGCAG GAGAAGATAA CAGAAGCTAA      120
ATCCAAGAC AAAAGTCAGA TGAAGAGGA GAAGACAGAG ATGATCCGGT CATATATCCA      180
GGAAGTGGTG CAGTATATCA AGAGGCTAGA AGAAGCGCAA AGTAAACGGC AAGAAAAACT      240
CGTAGAGAAA CACAAGGAAA TACGTCAGCA GATCCTGGAT GAAAAGCCCA AGGGGGAAGG      300
TTCCTCCTCA TTCTGTGCGG AAACCTGCCA TGAGGATCCC TCTGTTTCCC CCAAACCTGA      360
G
```

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 393 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

```
GAATTCGGCC TTCATGGCCT ACTGGGGGAA GAAGGCTGCT TTATGTTTAT TTTCAAGAC      60
TTTAAAAATA TTTTGTGTTT GTATTGCACT AGGAAATCTC TCCACCTCT CCCTTTTCTC      120
TTTCTTTCCC TATACAAAAT AAAAGGCCCA CCATAGAGAC TAGGCGGCCG AAAGACTAGG      180
AGGGCTGAGG AAAAGAAATA GGTCTCTGGA GGTGGAATA AACTGTGCA GCTGCCTCTT      240
CCTGGCGGTG GATGCTGCTT TGGGAGGGCC AGGGAGGCTG CAGGGGGACA GTGTTGGGAT      300
TGTCAGGAA AAAGGGGTAG GAAGGAAGGT GGAGGGATTG ATCTAGTACC AGGGAGAATA      360
TTCCACTGAA CTGTGATTCT ATGCGGCCTC GAG
```

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 335 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```
GAATTCGGCC TTCATGGCCT AATTTGTTAT TGCTAGAAAA TACACAGTTT TGAGATTTTT      60
GGGCATAATT GGCCTTAGTG TGTCATTCT GCATTAAAT ATAGTTAAT AATCAGATGA      120
AAGCAGCCAA TAACCTATGG CTTCTGFACT TTCTGGTGAA AGTTTTGTTA ATGTTTTTAA      180
TTTGATTTT TCTGCTTATA AATTTGTCCT TAAATCACTC CCCTCCTCC CCCCCCCC      240
ACTCCTTCTC CCTCCTTCCC GCCCCCCAA CTCCTTCTCC CTCCTTCCCG CCCCCGCGAC      300
TCCTTCTCCC TCCTTCCC GCCTCCGATCC TCGAG
```

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```
GGTGACATAT TTATTGCTTC TGTTCCTCAA CTACATCACT TCAACTAGAA GTAAAGCTAT      60
GATTTTCCTG ACTTCACATA GGAGGCAAAT TTAGAGAAAG TTGTAAAGAT TTCTATGTTT      120
TGGGTTTTTT TTTTCCCTTT TTTTCTTTAA GAGTATAAGG TTTACACAAT CATTCTCATA      180
ATGTGACGCA AGCCAGCAAG GCCAAAAATG CTAGAGAAAA TAACGGGATC TCGAG          235
```

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```
GAATTCGGCC TTCATGGCCT ACCACAATCT GTTTGCTTTT CCTCTTTAGA TTCCAAAAAT      60
AACACCCCAA AGGCTACCTT TTCAAATATT CTACAACATC TGCAAAAATC TTTAGTACTC      120
TGTCCTTGGA GTCAGTCAAG AAATTCCACC CCAGAAGTGT AAAAACCAAT CAATAATATA      180
TGACACTGAT TTTCTCTAAA TTATTATTTT TCTTATGGTT GAGTCTCCTG CCAACTTTAT      240
GTTTCCCAAT CGGCTCG          257
```

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```
GAATTCGGCC TTCATGGCCT AGCTGGGCAT GGTGATGCAC GCCTGTAATT CTAGCTACTC      60
AGGTGGGGGG TTAAAGGTGA GGCAAGGTCA GCGGTGAAGT GCAGCTCAGA GGGAGGGGTC      120
AAACATAAAC CAGAACTTAT AGGTCTAGAG GTAAATGGG ATTATGCGG GGCAGAGGTC      180
AAAGGTGAAG CAGAAGTCAG GGGTGAAGGA AGGTCTGCAA AGTTAAAGGT GCGGTTTCCA      240
GAGTCAGAAG GGGTGCTCGA G          261
```

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGATTGAATT TTAAACACAG TCCTCTCAGA AACTGACTAA | 60  |
| AACAGGTTTT AAAATTAGCA AATATTAAGA ACATACGAGT AAAAGTCAGT TTATTTTGA  | 120 |
| TAAGTAGGGA TTAAATTCA ACAAAAATAA ACACATTTTA AACTCCTATA ATACATTTAT  | 180 |
| TAAAATAAA TATATTTTG CCAAAGAAG TGTAAGTCA AAGAGTTAAC ATACAGATTA     | 240 |
| TATCCTATGA GATATAATAA TATTAGAAAC TGGCTCGAG                        | 279 |

## (2) INFORMATION FOR SEQ ID NO:71:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AGTTACATTT ATAATCAGTG AGGAAAATAT AAATATACA | 60  |
| ATAAATGAAA GGGTCATTGG CCAATTGTTT GGAGGGAAAA AATACACCAT GTTCTAAAT | 120 |
| AAATTCTAG TGATTATTG TGACTTTCAT GCATTTGGAT GATTTAAAG ATTTTATATA   | 180 |
| AAATGAAAC CATAGCCTTA CGAGAAGAAA ATATAAGAA AAACCTGTAT AGTCTGGGA   | 240 |
| GGGGGATTC TCGAG  | 255 |

## (2) INFORMATION FOR SEQ ID NO:72:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

|   |     |
|---|-----|
| GCGATTGAAT TCTAGACCTG CCTCGAGATC GTCTTTTCTA CCTGGATGAG AGCTCTACCA | 60  |
| CTTCTTTCCT TTGACACT CATCTCATT TATGCACTCT TGGGCTGTAA CTGTCATTC     | 120 |
| TTTCCTGTA CACTCGAG  | 138 |

## (2) INFORMATION FOR SEQ ID NO:73:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ATCACATTGC ATTAAATCTG TAGATTACAT TGAGCATTAT | 60  |
| GGACATCTTC AAAATATTTT AAATTTTGAA CAGGAGCATG CTGAAGAGTG TGTGTTTAA  | 120 |
| TTCTATGTA TTGTACATT TTTTCTCT ATCTTATACT GCCGAGACCA GCTCAGTCG      | 180 |
| GGAGACCCTA ACCCAACGGC AGCTCGAG                                    | 208 |

## (2) INFORMATION FOR SEQ ID NO:74:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 268 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```

GAATTCGGCC TTCATGGCCT ACATGAAACT GTTAGTCACT TCATTCTGT TTCTTCCCTG      60
TTGCAACAGC CCATCTTCGT GGAAGAACC AAGCTTTAGG CTGGGCTCTG AACAGCCACA      120
AAGTGACTTG GCTGAGGTCC TGCCATTTCG CTCATGCTCA GCAGGGGGCA GCAGACCAGG      180
GCAGTTCAGA GTATGGGGTC AAACCCAGGT CCCTGTCCC ACTCCACCTG TGGATTAC      240
CTGGATTGGG CAAGCCCCAT TACTCGAG      268

```

## (2) INFORMATION FOR SEQ ID NO:75:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 286 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```

GAATTCGGCC TTCATGGCCT ACGTGAACAA GACCTCCCA AACCTTCAGG TAGTCAACCA      60
CCAGCAAGGC CCCCAACCACA GACACATCCT GAAGCTGCTG CCGTCCATGG AGGCCACTGG      120
GGGCGAGAAG TCCAGCACGC CCATCAAGGG CCCCAAGAGG GGACATCCTA GACAGAACCT      180
ACACAAGCAT TTTGACATCA ATGAGCATTG GCCCTGGATG ATTGTGCTTT TCCTGCTGCT      240
GGTGCTTG TGATTGTGG TGTGCAGTAT CCGGGAAAAG CTCGAG      286

```

## (2) INFORMATION FOR SEQ ID NO:76:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 199 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

```

GAATTCTAGA CTGCCTCGA AAATACACTG TTACTATCTT AATCTCAAGA GTGTCATTAC      60
AGTGAGAATC TCATTAAAA GCATACCACT GAAATTAATA GCAGTGCTTA TCAAGAACA      120
CTGAAATCTG TGAGAATCTT TCTAGGAGCA TTCTTTTCTT CTTTGTAGTC CAAGTTCCAG      180
GTAGGCCATG AAGGTCGAG      199

```

## (2) INFORMATION FOR SEQ ID NO:77:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

|   |     |
|---|-----|
| GATTGAATTC TAGACCTGCC TCGAGTTCCA CGTCCATGGC CATCCTGAGC ATGCTGCAGG | 60  |
| ACATGAATTT CATCAACAAC TACAAAATTG ACTGCCCGAC CCTGGCCCCG TTCTGTTTGA | 120 |
| TGGTGAAGAA GGGCTACCGG GATCCCCCCT ACCACAACG GATGCACGCC TTTTCTGTCT  | 180 |
| CCCACTTCTG CTACCTGCTC TATAAGAACC TGGAGCTCAC CAACTACCTC GAG        | 233 |

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AAGAATAGAG AAAACGTTTT CAGCAGGCTT CACAGAGAAA  | 60  |
| CCAAACAATA TTTAGAATAT GACAGCATAT GAAGAGTCTG CTACTCTCCC AGTGACCCAT  | 120 |
| ACTTTCTCTT CCATCTCTGC TGGTCTCTC TACTACCGAT TCTTTCTTGC TGTCTCCTT    | 180 |
| GTCCATCACC GTGACTTCTA TTGCCTTACT CTAATGTCTT GTCTTCTGTG TTACCCCTTCT | 240 |
| GTGTGTTTGG CATTCAAGAC TCCCCTCCG CTCGAG                             | 276 |

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAAAATCCCT GGCTGAGAAC TATTGGATTA | 60  |
| GGGCCTCCNG TACCTATCTT TGAGGGGGAA AGGATGCTAC CATCAACTTT TCTGAATGCC | 120 |
| AGGAATGCCT TTTAGTATAG TTATTTCAT TACTATTTA TAGCATATT TAATTGTATA    | 180 |
| GTAAGCATTG TGTCTGTTTT ATGTAAGGA AACTAAAATT GAGAGATTAG GCTGCTCGTG  | 240 |
| GTGGCTTATA CCTTGTAATC CCAAGCACTC GAG                              | 273 |

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

```

GAATTCGGCC TTCATGGCCT AGCGAAATGA CGAAATCTAG CCCTTTGAAA ATAACATTGT      60
TTTTAGAAGA GGACAAATCC TTAAAAGTAA CATCAGACCC AAAGGTTGAG CAGAAAATTG      120
AAGTGATACG TGAAATTGAG ATGAGTGTGG ATGATGATGA TATCAATAGT TCGAAAAGTAA      180
TTAATGACCT CTTCACTGAT GTCCTAGAGG AAGGTGAACT AGATATGGAG AAGAGCCAAG      240
AGGAGATGGA TCAAGCATTG GCAGAAAGCA GCGAAGGGCT CGAG                        284

```

## (2) INFORMATION FOR SEQ ID NO:81:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

```

GGGAACTGGA GGAAAACCAT CACAAGATGG AGTGCCAGCA AAAACTGATC AAGGAGCTGG      60
AGGGCCAGAG GGAAACCCAG AGAGTGGCTT TGACCCACCT TACGCTGGAC CTAGAAGAAA      120
GGAGCCAGGA GCTGCAGGCA CAAAGCAGCC AGATCCATGA CCTGGAGAGC CACAGCACCG      180
TTCTGGCAAG AGAGCTGCAG GAGAGGGACC AGGAGGTGAA GTCTCAGCGA GAACAGATCG      240
AGGAGCTGCA GAGGCAGAAA GAGCATCTGA CTCAGGATCT CGAG                        284

```

## (2) INFORMATION FOR SEQ ID NO:82:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

```

GAATTCGGCC TTCATGGCCT ACTGTGTTGA CTTGGTGGCT TGCTTGATAA GAAGGTTTTA      60
TGAAGCACAG CAGATATCTC AGCTGCTAAT CCTGTAAGCC CTTTACCCAT TCTCGCTTTT      120
CTCTGCTCTT GCCACATCAT GAATAGATTG GTATACTATT GTGGGATACT TCTAGTTTTA      180
GCACATGATA TAGGTTATGG TTAATGTTCC TTTCCATCTT CCTGGTTACT GATAATGTTT      240
CTTTTCTGTA GATGGGTCTA TTCGATGGAA GAGTTTCAGC TTTGTTCTGT TTATTTCCCT      300
GGGACCTCGA G                                     311

```

## (2) INFORMATION FOR SEQ ID NO:83:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

```

GAATTAATCG TAAGAGAACC TCAGCATTGT GCACGATAAG AGAATGTGTC AGTATTTTCAG      60
GGTTCTACAT TTTATCTGTA AAATGTGACT TTTTITTTTT TTTATCACAA CAGAAGTAAA      120
ATGTTGCTTT GTACCTGGTG TCTTTTATTA AGAATTIAC CCCCCCATTT CTCACAGAGA      180
ATAACAGTCG GGAGTCATTG TCACAATATA ATAGAAATGT TAGCAACCG ATTCAATGTAA      240

```

GGACTAAGTG GTCCTCATGA ATTGCATTAA GACTCTGTAC TGCTCATATT ACACTCCATC 300  
CTCTCTGTAG TTTGCTGGGT ATTCTCGAG 329

## (2) INFORMATION FOR SEQ ID NO:84:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC TTCATGGCCT AGAAAGACAT CATTAAAGTN CTTTAAACAT TTAGTTTGTG 60  
GTCATAAGTT GACCTTTATG TGCTTTCTGA ATTGGAACCTT AAAATAATCT TTAATTCATT 120  
ATTTTTTCTA CTCTAGGCC AGTTTGTAGT TTAATATTTA TAAAAGGTTA GATAGTTATA 180  
GATAGGATTA TTTTGCAGTT TTGAAACAAC ATACAAATTG TTATAGATT T CAGAGTAGGG 240  
CTAATCACAG GAAAGACAAA AGTCAGAATG CTTNAGGTAA GCCCCTTCTC ATTATATAAG 300  
ATCAAGCTCG AG 312

## (2) INFORMATION FOR SEQ ID NO:85:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GAATTCGGCC TTCATGGCCT AAAAAGTTTC AACTTAGAAA AACTAGCAAG GGATTGTTCA 60  
CCCTTACCCC AGTGGTTGGT GCTAGAGAAA AAATGGAGGA TGTCTGTTCC ACGCAGACCC 120  
TGGTGGTTTA AAACACACAT ATAGATGGCT CTGGGACCAT CAAAATAGCA GCAGCAAAGA 180  
GCCACTCCAC CAGCCTCCCC TCCACTCCCC CAGGCCCCAC ACAGCAGAAG GCTCCAGCCA 240  
CTTTTGGAA GCCTGTAGCC TGGCTCCATC TTGCCCTGTG CCACAAATGC CCATGGCCCT 300  
CGAG 304

## (2) INFORMATION FOR SEQ ID NO:86:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

GAATTTTGAA CACTAAAGCT TTGGATACAC AAATTTATAA CATCTTATTT ATAAATCAGT 60  
GGTGATACAGA AAGCAGAGAT CCCATAATCA AGCATGGCAA ACATGTTGAA GAATATGCTT 120  
ACAATGATTT CTGCTATAGA TTTCATAATG GGGATTGAGA GAAGTAGAGT TATGGTGCTG 180  
GTTCACTGCA TTGATTGGAT CAGGCGCTGG AAACCTCTCC TGATAGATTT TATTCTCACC 240  
TGTGGGCAA TTTCCAGAAT ATTCTGCTGT AATTTTACAT GTGGGCTCGA G 291

## (2) INFORMATION FOR SEQ ID NO:87:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 423 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

```
GAATTCGGCC TTCATGGCCT AGCTAGAAAA AAAAAAAAAA AAGCCCTTTT CAGTTTGTGC      60
ACTGTGTATG GTCCGTGTAG ATTGATGCAG ATTTTCTGAA ATGAAATGTT TGTTTAGACG      120
AGATCATACC GGTAAAGCAG GAATGACAAA GCTTGCTTTT CTGGTATGTT CTAGGTGTAT      180
TGTGACTTTT ACTGTTATAT TAATTGCCAA TATAAGTAAA TATAGATTAT ATATGTATAG      240
TGTTTCACAA AGCTTAGACC TTTACCTTCC AGCCACCCCA CAGTGCTTGA TATTTCAGAG      300
TCAGTCATTG GTTATACATG TGTAAGTTCCA AAGCACATAA GCTAGAAGAA GAAATATTTT      360
TAGGAGCACT ACCATCTGTT TTCAACATGA AATGCCACAC ACATAGAACT CCAACATCTC      420
GAG                                                                                   423
```

## (2) INFORMATION FOR SEQ ID NO:88:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 172 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

```
GCGATTGAAT TCTAGACCTG CCTCGAGCTT GGGGGGATTA CAGTTCAACA AGAGATTCAG      60
GCAGAGACAA ATATTCCAAA CTATATCAGG AATTAGTAGT GCTTTGCTGT CCTTTGCGAG      120
CTTTGAGTCA ACCCATATGA GAGTGAATTC TCCGATCCTG TACATACTCG AG                   172
```

## (2) INFORMATION FOR SEQ ID NO:89:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

```
GAATTCGGCC TTCATGGCCT ACCCGTGTG TCCAGTATAC CTTATAACAC TTAGCCACTT      60
CTCCCCACCC TCCAGAAGGG GTCCACGTTG AATTCTGAAT CATCTTGAAA ATAAGATTCC      120
AACCACAAAA AAAATTTAGC CATTCTTTA CTAAAAAAAA CCAAAAAACA AATCTGTTTT      180
ATAATCACAG ATTTTTAGAC AAATTTCTTG TATCAGGAAG AAATACAAAT TTTGTCATGT      240
TTCTCAAGCA GTGTCTCGAG                                                                 260
```

## (2) INFORMATION FOR SEQ ID NO:90:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AAACCTAAGAT AAAAATAAAC AGATAGGAGA GCTGAATTCC | 60  |
| ATTTCAGTC CTCATGTATA TGCTTACAAA GTTCCAAATT AAGCTTGGGA CTGGTTCTTA   | 120 |
| CATGGCAGGT AATCCAAACC TTTTCTATTT ACTGAAGATT TTCAGCTCTC TTACAGAAAT  | 180 |
| ACACAGGCTA CCATTAAAT TGTAGGATA AATTTTAAAT TGAATTTGAA AATAAGAGCA    | 240 |
| AGTACTCGAG   | 250 |

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 260 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

|   |     |
|---|-----|
| GAATTGAAAC ACAGAGTTGT TCTGCTGATA GTTTTGGGGA TACGTCCATC TTTTAAAGGG | 60  |
| ATTGCTTTCA TCTAATTCTG GCAGGACCTC ACCAAAAGAT CCAGCCTCAT ACCTACATCA | 120 |
| GACAAAATAT CGCCGTTGTT CCTTCTGTAC TAAAGTATTG TGTTTTGCTT TGGAAACACC | 180 |
| CACTCACTTT GCAATAGCCG TGCAAGATGA ATGCAGATTA CACTGATCTT ATGTGTTACA | 240 |
| AAATTGGAGA AAGTCTCGAG   | 260 |

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 354 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AATTTCATCT TTTTTCCTG GTGCTGCATA AACATATATT  | 60  |
| AAATGTTGTT ACTGATCCCT AGTACTGTTG ATTTGTGACC CTTCTCCTGA GGGAGACTAA | 120 |
| AGCTGCTTGA GCTAAAGGCT TTTGAGACAT CCCATACGGT TCCCTGAACA AAGTTTCTC  | 180 |
| TCCTGACCTC AGTTCTCTTG ATGACCTTGG CAAGTGGGCC CGACTAGTTG GACACTAATG | 240 |
| AGGCATCGTA ACATGCCGGC CCCATCCTGT CCATTCTGTT CTCTTTGCCA TCTAGCATTC | 300 |
| AGTGTGTTGT CTTCTAGTG GGCATGAAGA CGGCTTTAA ACCATCCACT CGAG         | 354 |

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 493 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

```
GCTGAAAATG CAAAACATGA AGAAAGTGAT TGAGGCAATT CGAGTGGAGC TGGTTCAGTA      60
CTGGGACCAG TGCTTTTATA GCCAGGAGCA GAGACAAGCT TTTGCCCCCT TCTGTGCTGA      120
GGACTACACA GAAAGTCTGC TCCAGCTCCA CGATGCTGAG ATTGTGCGGT TAAAAAATA      180
CTATGAAGTT CACAAGGAAC TCTTTGAAGG TGTCCAGAAG TGGGAAGAAA CCTGGAGGCT      240
TTTCTTAGAG TTTGAGAGAA AAGCTTCAGA TCCAAATCGA TTTACAAACC GAGGAGGAAA      300
TCTTCTAAAA GAAGAAAAAC AACGAGCCAA GCTCCAGAAA ATGTTGCCCA AGCTGGAAGA      360
AGAGTTGAAG GCACGAATTG AATTGTGGGA ACAGGAACAT TCAAAGGCAT TTATGGTGAA      420
TGGGCAGAAA TTCATGGAGT ATGTGGCAGA ACAATGGGAG ATGCATCGAT TGGAGAAAGA      480
GAGACTCTC GAG                                         493
```

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

```
GAATTCGGCC TTCATGGCCT ACACACGGCC AAATTGAGG GCATTCTCAC ATGTGTCTCT      60
CTCTCAAAAC CACTGGGGTT GACAGATCCA GGAGGCTAAA AAAAAGTGAC CTCTATAATT      120
CTTTAAAGGT GCTATTTTGA GAANATTGTA TAATTATTC ACAGTATATC TAAACAGAA      180
TTAAGGACAA TTAAATATC TTATGTGACA GCCTTTATGT CTAGTCACAT TTATGAAAT      240
AAAAAATTC TGAATCTGAA TAGAAGTTCT ACTGTNTCAG GATTGAATC GAG              293
```

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

```
GAATTCGGCC TTCATGGCCT AAAAGACAG GAAAATAAGT CTCTTTGTAT CCTTATTAAT      60
CATTTGAAAT TATGCTATAA TATTTTAA AACTCACCTG TTTGGTCTG GGTGAAGCAG      120
TTCCTGAAGG AGTGTGTTGT CAGAATATAT TGTTAGGTGA ATAGAGGTT CTGTGGCCAA      180
GTAAGTTGG GAAATAGTGG GTTAGACAAA GTTGAGTTAC TGTGGCCTT TCAGACCTTT      240
GATACCTAA TGTGCATTTT AAATCTCCAA GAAGCTCGAG                                         280
```

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

```

GAATTCTCCA GCCTGGGTGA CAGAGTAAGA CTCCATCTCA AAAACAAAAA AACCCAACAG      60
GATAAAATTT AATAGGAGTA AATATAAAGT TCTACGTTTT GATTTTAAAA ATCTAGGTAC      120
TGTATAGTGT GTATTAGTTG GGGTTCCTTT TTTGAACTT AATCTTGCCT ATAAACACA      180
AAAGAGTTTA AGATGATATT GAGACTCCTC CTGTCCTCAT TCCTTTTCCT TCCTAATAGC      240
TCAGTCCTGA AGCTCTTAGG TGAGGCAGAA CAACTCGAG      279

```

## (2) INFORMATION FOR SEQ ID NO:97:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

```

GAATTCGGCC TTCATGGCCT AGGATACCTT CATTTCAAGG AGCCTCTTTA CAGTAACTGG      60
GCTAAACATT TTGTTGTCGT CCGTCGGCCT TATGTCCTCA TCTATAACAG TGACAAAGAC      120
CCTGTGGAGC GTGGAATCAT TAACCTGTCC ACAGCACAGG TGGAGTACAG TGAGGACCAG      180
CAGGCCATGG TGAAGACACC AAACACCTTT GCTGTCTGCA CAAAGCACCG TGGGGTCCTT      240
TTGCAGGCCC TCAATGACAA AGACATGAAC GACTGGTTGT ATGCCTTCAA CCCACTTCTA      300
GCTCGAG      307

```

## (2) INFORMATION FOR SEQ ID NO:98:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

```

GAGCTGTGTC AGCATCGATC AGGGGTCTGT AGACAAAAAT TCCCAAAGAT TTGAGACTTT      60
ATTGGGGGAA ACAGATCACT GGCGGGGAAT AAGCCACAGG CCAAAGGAGG AAATGCTGGG      120
ACCAGAAGTC CCGCTGCGG CTTTTGCTA AAAGTTCCGC ACGCTGCTC GGCGTGGGCG      180
CAAGCATAGT GTCGTCGGGG CTCTGCGACG TCTGATTGGC TCTCTGCAGT GCACCGTCGA      240
GGTAGAAGGC TCAGCTCCTA GTCGCTCCA AATTACTTTG TTGGTGCTCG AG      292

```

## (2) INFORMATION FOR SEQ ID NO:99:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

```

GAATTCGGCC TTCATGGCCT AGCTTGAGGA ATGACCCAAC TCTCTCTGGA AAGTCACTTT      60

```

```

GCCTCTCTGT TCTGGTTCTC TCATTTTATA AAGTGCCTTC TTCCTTCTG CATTATAAG      120
TAAACATGAG AAAAATCTGA AAAGACTTCT TCAGGATGTT TAAGGAAACA AATGTTGCTT      180
TCCTTGGGTT GGGTCGTTT ATAAGAGTGA TGTTTGCCAT AAAACTGGAG CCTCATAGAC      240
GATCCTGCAG GGAGGAAGCT TTCCTTGGTC ACCTGACTCA TGTGTTTATA TATAGTATAG      300
AGGAGAGGTA TTCCAAAAGA CCCGTCGCTT TTCCTGTGTC CCACAGCTGC CTGTAGAGTT      360
GTGGCACCAT AAACCTTAGC AGCTGGAAT CCTCGAG                                397

```

## (2) INFORMATION FOR SEQ ID NO:100:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

```

GAATTCGGCC AAAGAGGCCT ATTAATTTAA TAAAGCCATA TCATACCTCT CTTTAACATT      60
GTTAAAAGGA AACTGTGTGT GTGTATTTGT GTTAATGTTA ANTTCTCTTC ATTTTGTGTC      120
TTGGGGGGCT GTTTATTTGA GGATGGTCGG GGGGCGGGTG GGTCAGACCC ATCCATCCCC      180
CATGGAAGAC CAGACCCATC CATCCCCCAT GGAAGACCAT TCCCGTGTGT TCAGACTGGC      240
AGGGTACTTC CATAGACAGG AACATTCTGG ATGCTCTGAT GCTGAACACT ACCAGAATCG      300
GCCATGGATT TGCTTTGAGC AAACACCCCG CAGTCAGGAC TTACTCCTGG AAAAAGGACA      360
TCTTCTCGAG                                370

```

## (2) INFORMATION FOR SEQ ID NO:101:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

```

GAAAAAATA GACAAACTA TGATGTAAAA ATGCTTAAAA ACAATTATTC CTCTCTGCTA      60
ATTTTAATGC AAAATAAATG ATGCTAGCAT TTAATATGTT TATATGATCT TGTTTTTAGG      120
ATTGAAATTT TAATACAATG GCCTTTTGTA ACTATTTTGA CTATTATAGC TCAGGTGTTT      180
GAATTCCTC TACCCACCT ATCACCCTA TCCCCTAACA AAGAGTCTGG CTTCAATAAT      240
ACTGTTGAAT GAAAATTGGT TCTCTAAATG GTTAAACAAGA TGAATCCACA TAAATCATAA      300
TTCAGTACTG AGGAACCGAA TTTATACCCA GCGTCTCGAG                                340

```

## (2) INFORMATION FOR SEQ ID NO:102:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGA TGTGAGAATG ATGGGCTTGG      60

```

```

AGTGTCTCTGG  AATAGCTGG  GAGGCCTGTG  TGTTTAGGAG  CGCCTTAAAC  AGTAGGATAT  120
AAGGGCAGAG  AAGTAGCTGG  GAACTGAGAA  GAACTTTGGC  TGTATTCTA  GTAAGACTGA  180
AAATTTCAGG  TGGGATTGA  ACAGAGATGT  GTGGTGATCT  GACTTGGTTC  ATTCTGCTGT  240
GGTGAAGAGA  CTGGAGGTGC  GGGGCAAGTA  TGGGAAGCATG  GAGACCATT  ATTTATGGGG  300
GCAATGGTAG  AGGGAAGAGA  AACAATGCTA  TTAAGTGGAG  TAGGAGCACA  CAGAGAACAA  360
GCCACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:103:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 270 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

```

GCGATTGAAT  TCTAGACCTG  CCTTGAGATC  ACCGAGTGCT  TCATCTCTGA  CAGTTCCTCT  60
GACCAGATGA  CCACAGGCAC  CAACGAGAAC  GCCGACAGCA  TGACATCCAT  GAGCACACCC  120
TCAGAGCCTG  GCATCTGCCG  CTTTACCGCC  TCACCACCCA  AGCCCCAGGA  TCGGACCCGG  180
GGCAAAAACG  TGGCTGTGCC  CATCCCTCAC  CGGGCCAACA  AGAGTGAGTG  CTCAGACCAC  240
CTCCAGGCA  GTGCCCCCCC  GACTCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:104:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

```

GAATTCGCCT  TCATGGCCTA  ATATGCTTAT  GAATATGATG  TTGATGGACA  GTCCTCAACA  60
GTTTACCTCA  ATGAAAAGAT  AATGTGGCGG  TACAACTACG  ATCTGAATGG  AAACCTCCAT  120
TACTGAACC  CAAGTAACAG  TGCGCGTCTG  ACACCCCTTC  GCTATGACCT  GCGAGACAGA  180
ATCACTCGAC  TGGGTGATGT  TCAATATCGG  TTGGATGAAG  ATGGTTTCCT  ACGTCAAAGG  240
GGCACGGAAA  TCTTTGAATA  TAGCTCCAAG  GGGCTTCTAA  CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:105:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

```

GAATTCGGCC  TTCATGGCCT  ACTTAAATCT  TAGATGCTAA  TGGGAGAAAC  TGATTTTITA  60
AAAAACAGGG  AACTAATTA  ACATTTTATC  AGATATGCTA  TGAAGTAAAC  AGTTGAAGAC  120
TGACAGTCCA  GTGGATACCG  AGGAGTTCCT  TTAGATACCC  TGGTGAGGTA  AGGACACAGG  180
CAAGGGGAGA  GCTGAGACCT  GAATATGAGG  AGAAGCCAGG  CGAGCACACA  ATAGGGCAGA  240

```

AAGGAGCAGT AGGTCAAAGC CTGAGGCAGG AGAGAGCTTG ACTGACTCGA G

291

(2) INFORMATION FOR SEQ ID NO:106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGAAATGGTT CTGAAAGCGA CAGTAGAGAG ATGCAGTTGT | 60  |
| GATGATTTCA ACAACCTGGA TGTTCCTTT CTCCTCTTG CTCCATTCA TCTCTGTTGG    | 120 |
| CTGCTGTTGA TGGAGTCAGA CAGTAAACAC GTGGCTTGA TAACACCCAT CATCCTATGA  | 180 |
| AGAATATAGG GAGTACTTGT TCTCTGTGA TTCAACTTT ATGCTCCAG TAACATTGCG    | 240 |
| CTTATGAAGG TACCTGTATT TGTATGGACT CTGAATAAAG AAGAATTCAT TTGTTTAGCA | 300 |
| AGTATTAGTT CAGCAACCAC TGAGAAACAA GCACTCGAG                        | 339 |

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACATCATGTC AAAGAGTACT ACATACAGTT TGGAACTCTC | 60  |
| TAAAGACCCG GTACTACCAG CTCGTTTCTT CACTCAACCT GACAAGAATT TCAGTAACAC | 120 |
| CAAAAATTAT CTGCCTCCTG AAATGAAATC ATTTTTCCT CTGGGAAAAC CTAAAACAAC  | 180 |
| CAATGTTCTA GGAGCTGTTA ACAAGCCACT TTCATCAGCA GGCAAGCAAT CTCAGACCAA | 240 |
| ATCATCACGA ATGGAACTG TAAGCAATGC AAGCAGCAGC TCAAATCCAA GCTCTCCTGG  | 300 |
| AAGAATAAAG GGGAGGCTTG ATAGTTCTGA AATGGATCAC AGTGAAAATG AAGATTACAC | 360 |
| AATGTCTTCA CCTTGCCCG GGAAAAAAG TGACAAGAGA GACGACTCTG ATCTTGTAG    | 420 |
| GTCTGAATCG GAGCTCGAG  | 439 |

(2) INFORMATION FOR SEQ ID NO:108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGAGAGGCA GGTCTAGAAT | 60  |
| TCCAAATGTA AAATTTACTA AGGCTTTTCA TGTGGAAGTA GAATGCATAT ATCTTTCTTG | 120 |
| ATATAACAAA TGAATTTGGT TGTAGCTAAC GTGTTGTACT AGTAAAGGTC CACCTGCTAA | 180 |
| ACTTTTCTT TTTGTTGAG GTATAGACAG TAGAGTGATA CCGATACATG AGGAAAAATGA  | 240 |
| GAACTGGAAT GCAGGCCAAA AGCTGGTCCT TTCCAGATGA ATGTAACCAA GACTCGAG   | 298 |

## (2) INFORMATION FOR SEQ ID NO:109:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```

GAATTCGGCC TTCATGGCCT ACACTCTCAA ATATGTGGCC TTAAACGGGA CCAAAGTAGG      60
AAAGCAGATA GTGGAAGAACT TCTCTCCCAA TCAGACCAAG TTCACGGTGC AAAGAACGGA      120
CCCCGTGTCA CGTACCGCTT TTACCTCAG CGCCAGGACG CAGGTGGGCT CTGGGGAAGC      180
CGTCACAGAG GAGTCACCAG CACCCCGAA TGAAGCTTAC ACCAACACC AAGCAGACAT      240
CGCCACCCAG GGCTGGTTCA TTGGGCTTAT GTGCGCCATC GCCCTCCTGG TGCTGATCCT      300
GCTCATCGTC TGTTCATCA AGAGGAGTCG CGCGGCAAG TACCAATAC TCGAG              355

```

## (2) INFORMATION FOR SEQ ID NO:110:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 407 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

```

GAAAAAAGTGGTCAAAGAA TTACGGAAAA TGTGGGAAA TGAAATCTGT TTATGTATAG      60
TTGGTAATAA AATAGACTTG GAAAAGGAGA GACATGTTTC CATTCAAGAA GCAGAGTCGT      120
ATGCAGAATC TGTGGGAGCA AAACATTATC ATACTTCAGC CAAACAGAAC AAAGGAATTG      180
AGGAACTCTT TCTTGACCTT TGTAAGGA TGATAGAAAC AGCACAAGTG GATGAGAGAG      240
CAAAAGGCAA TGGCTCTAGT CAGCCGGGAA CTGCAAGGCG AGGTGTACAG ATTATTGATG      300
ATGAACCTCA AGCCAGACC AGTGTGGAG GGTGCTGTTT TCTGGATAA CTGTTACGC      360
CTAAGAAATT AAAAGACAGA ACAAAGTGT GGATCATTGC CCTCGAG              407

```

## (2) INFORMATION FOR SEQ ID NO:111:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 395 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAGT ACATTAAAGC AACTTGCATC TCAAAACAAT      60
ACATTTCTCT GGTGAAGTT TTAGTGAAAA TCGATTTATT CCTCCTCTGA GTTTTACCCA      120
ATGGGTAAAG TTGTCTAAAT ATGGGATTCC TTAGAATCCA TCCTCCTTCC CAAGCATTTT      180
CCCATGTTTC CTTCCACCCC CAAATTCTTA CCCCATTTC GGCAGAGCTG AGCAACATA      240
AGCCTTCTCT GAAGTATTGA GGGAAAGTCT GCTAAACGGC TAAACTACTT AAGGAGCTAA      300
CAGAAAAGGT TGTATCAGAG AACAGTGA GAAACACAGG TTTCTAATTA TATCTGGCAC      360
TGGAGAGAA GTCAAAGGTA TTGCCCCAGC TCGAG              395

```

## (2) INFORMATION FOR SEQ ID NO:112:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 301 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

```

GAATTCTAGA AACTACAGTA GTGGGACACA TAACATAGAA GTAATCGTCC AGGATTCTGC      60
TGGAAGAAGT AAGAGTGTTC ACCACATATT TTCTGTCAA GAGAATAATC ATCTCAGTTT      120
TGATCCCCTG GCATCATTTA TTCTCCGTAC TGATCACTAC ATCATGGCCC GGGTCCTTTT      180
TGTGCTGATT GTGCTGAGCC AGCTCACCAT TCTCATTATT TTTAGATATC GAGGATACCC      240
AGAGCTTAAA GAACCTTCAG GGTTTATAAA TCTGACCTCA TTTTCTCTTC AATGTCTCGA      300
G

```

## (2) INFORMATION FOR SEQ ID NO:113:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 268 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

```

GAATTCGGCC TTCATGGCCT AAGCATGCTG TCTTGTGATG GTGATTTTCAT GTGTTTTCTG      60
CATGGGATTA TTAACGGCAT CCATTTTCTT GGGCGTCAAG TTGTTGCAGG TGTCCACCAT      120
TGCGATGCAG CAGCAAGAAA AACTCATCCA ACAAGAGAGG GCACTGCTAA ACTTTACAGA      180
ATGGAAGAGA AGCTGTGCCC TTCAGATGAA ATATTGCCAA GCCTTCATGC AAAACTCATT      240
AAGTTCAGCC CATAACAGCA GTCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:114:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 260 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

```

GAATTCGGCC TTCATGGCCT ACCCGCATCC CAGCTCTATT TAAAAAATA AAGAAGAAGA      60
TAATTCATT CTCTAAGCTG CCCTTACACT ATTAGTCAGG AATGTTTGTG TTCATTCCA      120
CTACATACCT TACGATCTCT TTTGCTTGC TTTTTCAG TCAAGTCTCT ATTTATGAGG      180
TGGACAAGCA AGATTGTCGC AAATTTGCA CTACTGGCAT CGATGGAGCC ATGACAATTT      240
GGGATTTCAA GACCTTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:115:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 259 base pairs

(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

```
GAATTCGGCC TTCATGGCCT AAACATTTTC TGAAAAACGT GATAGAAAGA AGGAGGAGCT      60
GTTTCTAGGA GGGAAATAAA TAATTGGCA GGAGACTTTT TGAAGTAGAT ATCTATTGAA      120
TAACAAAGTG ACAATGTTCC CCATCCTCTC ATTCCATTCC CCAATTTTAC TTCTCGTCCC      180
AATTCAAATC ATTCTTACTT ATGATCGGCG CTATGTCAGT GCCTCTCAGC TGGTCTTCCC      240
AGACCCAGTC ACCCTCGAG                                     259
```

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 238 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

```
GAATTCGGCC TTCATGGCCT AATTACATTT ATGCAACCAA GCTATCAAAA GGACTGGCTG      60
TCCTTGGGAA TGAAACGTAA CAAAATCGTC AATAGAGTAT TATTGGAAAA GATTGTTTTC      120
AGTCATGAAC TAGCTATTTA AATGAGAAAA CAAATGTAAT GATGCTTTCT GTCATGATTT      180
TATAAATAAA TGTCAATTGT AGGAAATTGG AAAAATAAAT GAAAAGAAA AACTCGAG      238
```

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 279 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

```
GAATTCGGCC AAAGAGGCCT ACCCTAGACC TGTTTTCTGT TCTCTACTCT TGAAATGCTA      60
ATGACCTTCA TGACCAGAGT CCGCTATTGC AGTTTGTGGT TGACAGGCAT CTCTCACTCA      120
CTGTGCTGCA ACTCAACTCT TTATCTTCAA CCAAACAGGG CCTCCCCGCA GCTTTCCCAC      180
TGCCACTCAG TGGCACTCCA TCCAGGGTTT CCAAAGTGTA AGACCCCGGA ATTTATCTTT      240
GACACTTCCA TCTCCCTCCA CCCCTCATCC AATTCATCA                                     279
```

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 656 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

```

GAATTCGGCC AAAGAGGCCT AGTTATAATG ATGGAAGAAG TGGAAAACT TTGTGATCGG      60
CTTGAAGCTGG CAAGCTTACA GTGCTTGAAT GAAACACTCA CATCATGCAC AAAAGAATAG      120
GAAAGGCTGC TTTGGAAAAA CAGATAGAAG AAATAAATGA GCAAATCAGA AAAGAGAAAG      180
AGGAAGCTGA GGCTCGTATG CGACAAGCAT CTAAGAACAC AGAGAAATCA ACTGGTGGAG      240
GTGGAAATGG AAGTAAAAAT TGGTCAGAAG ATGATCTACA ATTACTAATT AAAGCTGTGA      300
ATCTGTTCCC TGCTGGAACA AATTCAAGAT GGGAAAGTTAT TGCTAATTAC ATGAACATAC      360
ATTCTTCCTC TGGAGTCAAA AGAACTGCCA AAGATGTTNT TGGCAAAGCA AAGAGTCTCC      420
AAAACTTGA CCCTCATCAA ANAGATGACA TAAATATAAA GGCATTTGAT AAGTTCAANA      480
AAGAACATGG AGTGGTACCT CAAGCAGACA ACGCAACGCC TTCAGAACGA TTGAAGGTC      540
CATATACAGA CTTACCCCT TGGACAACAG AAGAACAGAA GCTTTTGGAA CAAGNTTTGA      600
AAACATACCC AGTAAATACA CCTGAAAGNT GGGAAAAAT AGCAGAAAGT CTCGAG      656

```

## (2) INFORMATION FOR SEQ ID NO:119:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

```

GAATTCGGCC AAAGAGGCCT AGAGACAAAT AGGTGATACT GAATTTTATA CTGTTTCTA      60
CTTTTCATT AAAACATTGG CACCTCAATG ATAAGAAAT TTAAGGTATA AAATTAAATG      120
TAAAAATTAA TTTCAGCTTC ATTTCGTATT TCGAANCAAT CTANACTGTT GTGATGAGTG      180
TATGTCCTGAA CCTGTAATTC TTAANAANACT TCTTAATCTT CTAGAAGAAA AATCTCCGAA      240
GAGCTCTCTC TAGAAGTCCA AAATGGCTAG CCATTATGCT TCTTTGAAAG GACATGATAA      300
TGGGACCAGG ATGGTTT TTTT GGAGTACCAA GCAAGGGGAA TGGAGCACTT TAAGGGCGCC      360
TGTTAGTAAC ATGAATTGGA AATCTGTGTC GAGTACCTCT GATCTAAACG GTAAAACAAG      420
CTGCCTGGAG AGCAGCTGTA CCTAACAATA CTGTAATGTA CATTAAACATT ACAGCCTCTC      480
AATTTCAGGC AGGTGTAACA GTTCCTTCC ACCAGATCTC GAG      523

```

## (2) INFORMATION FOR SEQ ID NO:120:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

```

GAATTCGGCC AAAGAGGCCT AATTCTTCC TGTGATATGA GAATTTCTTT TCTTTCAGCA      60
GCTTTACCTG CATTTGGCTT TGGCTTTTGC AATCGGCCCC TCATTCTCGA G      111

```

## (2) INFORMATION FOR SEQ ID NO:121:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

```

GAATTCGGCC AAAGAGGCCT AACCGCGGCC GCTACTTCGG CCTCTTTGGA AAAAAAAG 60
TGAAAGAAAA NATCACAATA CAGGGGAAAG TGAGCTAAAA ATCCCGGCAT TAAAAAGCCC 120
TTGATGTGGT CCTGAATCGG CTATTCTAT CTGTTCCCTG AGCCTAACCT CAGCGCTGGC 180
CTCTCTAAAC CTCTTTTCAG TCCTCTCATT TTGAAAACAG GGCCCATTTAC ACATTCTCTG 240
AAAGCTTGCT GAGTGATTTA ACCACATAGT CTAGGGGAGG CACTCATCAA ACATAAGGCC 300
TCTCTTTTGG ATTTTATCC TATAGTGGA TCTATCTAGA GGCTGGTGAA GACAGTGTGG 360
TGGAAGGAAA GTGGGAAGGA TACACTGAAA TAGGACATAG ACGTAGAGGG GAGTCGATGG 420
TCATCTGGCT TGATAGGAAA AGTTAGAGAG CTCTCCTGAA CCACAGTTAC AGAGCTTGGG 480
ATTATAACAC ACACAGCCCC AGAGAAAACA CTTGTTTTAC CATATTTCTT CTCTGCTGG 540
GGCTCTGGCA CCTTAATTGG TCAAAGGCA GCACCTCGAG 579

```

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

```

GAATTCTAGG AATGGGTCGG GAAGTTGAGA ATCTTATATT AGAAAATACA CAACTGTTGG 60
AAACCAAAAA TGCTTTGAAC ATAGTGAAGA ATGATTGAT AGCAAAAGTG GATGAACTGA 120
CCTGTGAGAA AGATGTGCTG CAAGGGGAAT TGAGGGCTGT GAAGCAAGCC AAAGTGAAC 180
TAGAGGAAAA GAACAGAGAA TTGAGGAAG AGCTTAGGAA AGCTCGGGCA GAAGCTGAAG 240
ATGCAAGGCA ACTCGAG 257

```

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

```

GAATTCCTGT AACTCGGAAA AGATATCAGA GGAATGTTG TGGCATCAGA GAGAAAGATG 60
AGAGCTCACC AGGTGCTCAC CTCCTCCTG CTCCTTCGTG ATCACCTCGG TGGCCTCTGA 120
AAACGCCAGC ACATCCCGAG GCTGTGGGCT GGACCTCTC CCTCAGTACG TGTCCTGTG 180
CGACCTGGAC GCCATCTGGG GCATTGTGGT GGAGGCGGTG GCCGGGGCGG GCGCCCTGAT 240
CACACTGCTC CTGATGCTCA TCCTCCTGGT GCGGCTGCCC TTCATCAAGG AGAAGGAGAA 300
GAAGAGCCCT GTGGGCCTCC ACTTTCTGTT CCTCCTGGGG ACCCTGGGCC TCTTTGGGCT 360
GACGTTTGCC TTCATCATCC AGGAGGACGA GACCATCTGC TCTGTCCGCC GGTCACCTGA 420
G 421

```

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

|  |     |
|--|-----|
| GAATTCTAGA CCTGCCTCGA GAAATGAAA GTCTTTTCTC AAAAACTTC TTCCCAGGTC  | 60  |
| TGTGAAGCAG CACAGTGGCC CCTTCTGGCT CTCACCTTGT ACCTCGTCCT TGTTCGCTC | 120 |
| GAG  | 123 |

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AAGATGGCGT CTCACAAATC ATATGCCAAT TACTGAAATT | 60  |
| GGAGGTGAAA ATATTCTAGA TTTATTGTGG GATATATATA TTTTATGGTG TATGGCTCCC | 120 |
| AACACCACAT GCCACTGAAC TATATAAAAC TTTATGTCAG AACACTTACT TGTGTCATAT | 180 |
| GTAACCCTCT TGCAATAAAT ATTCCCTTAC TACAGATCTG TCCCCTGTT CTCAGAAAAT  | 240 |
| AAAACATGGG AACGTTGGAA TGTCTCCTTG CTATAAGATA TTGAATTCTA GACCTGCCTC | 300 |
| GAG   | 303 |

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 508 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ATGAAGACAA AGCTAACTTA CAAAAGCAGC TGGTTGAAGC | 60  |
| AATGAATACG CAATTAGAAC TTTCAGAACA ACTTAAATTT CAGAACAAC CTGAAGATAA  | 120 |
| TGTTAAAAAA CTACAAGAAG AGATTGAGAA AATTAGGCCA GGCTTTGAGG AGCAAATTTT | 180 |
| ATATCTGCAA AAGCAATTAG ACGTACCAC TGATGAAAAG AAGGAAACAG TTAATCAACT  | 240 |
| CCAAAATATC ATTGAGGCTA ATTCTCAGCA TTACCAAAAA AATATTAATA GTTTCAGGA  | 300 |
| AGAGCTTTTA CAGTTGAAAG CTATACACCA AGAAGAGGTG AAAGAGTTGA TGTGCCAGAT | 360 |
| TGAAGCATCA GCTAAGGAAC ATGAAGCAGA GATAAATAAG TTGAACGAGC TAAAGAGAA  | 420 |
| CTTAGTAAAA CAATGTGAGG CAAGTGAAAA GAACATCCAG AAGAAATATG AATGTGAGTT | 480 |
| AGAAAATTTA AGGAAAGCCA CCCTCGAG                                    | 508 |

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 713 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

```

GAATTCGGCC TTCATGGCCT AGCGGCAGTC CAGATCACGG TTAGTGTGAC CTGACTGGAG      60
AAAAATTATG TGTCTGCAAT GATAGTTGGC AAGGTCCTGA TTGTTCTTTG AATGTTCCCT      120
CTACTGAGTC TTAGTGGATT CTGCCAAACG TTAAACCCCT CAGTCCTTCT GTAGGTCGGG      180
CTTCACATAA AGCAGTTTTA CACGGGAAAT TTATGTGGGT GATTGTTGGA TATACTTTTA      240
ACTACAGTTC TTTTCAAATG GTCCTAAATT ACAATTTAGA AAGCAGTATA TGGAAATGTAG      300
GAACTCCATC AAGGGGACCT CTCAGAGAT ATGGACACTC TCTTGCTTTA TATCAGGAAA      360
ACATCTTTAT GTATGGAGGC GCGCCAGGC CCGACCCCTC CCCCAGGG GCAGTCCCCT      420
TCTTGAGGT CTCAGCTGC GGGGTGGGG GAGTCATGCC CAGGGGAGGA GACTTTTAT      480
CTGGAGGGGA GAGAAGGATT CTAGGGGTGT GGAGTTGGAG AAAGAGGCTT CCTTGAGCCA      540
CCCTTCCAC CCCAGCCCTT GNTGGTCCCT AGGCCAAGCC ACCAAGTAA ACCTTCCAGG      600
ATACTAGCCC GCCAGCTGTG GGCCCCAGAA AGCCAGCCTG CCTTTTAGCA CTGGATACA      660
CACAGACCCA CGGAGCTCTC TGTGTTTGGC CTCTCACACA CACACAATC GAG      713

```

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

```

GAATTCGGCC AAAGAGGCCT AAGAGATTCA GGACCTGCAG AGTCGCCAGA AGCATGAAAT      60
TGAATCTTTG TATACTAAAC TGGGCAAGGT TCCCCCTGCT GTCATTATTC CCCCAGCTGC      120
TCCTCTGTGC GGGAGAAGAA GGAGACCCAC TAAAGCAAA GGCAGCAAGT CTAGTCGCAG      180
CAGCTCATTG GGCAATAAAA GCCCAGCT TTAGGCAAC CTGCTCTGGT AGAGTGAAC      240
TTCAGTCTTA CACCCCCAAC AGACCTCCAC AGTCGAG      277

```

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

```

GAATTCGGCC TTCATGGCCT AAGGCTACCG ATATTGGAGA AGCTAACTAT GGGTTTTACC      60
ACACGTAACA GCTTTTGGT GAAATCAGTT GTTATACTAA TAAGCTTTCC TCTAATTGAT      120
TTGAGTTTTG GTTTTTGTGT TTGTATTGCG GGGTTTGTGCT TCTTTTGTCT TCTTGTCTTT      180
AGTAAATTGG TTTTCTTCA ATGTATTTTC TTAAAGTAGT CTAGCTTTAC CCAGTTTCCT      240
TGGCAAATTG AAATTTAGGC CATGAAGGCC GAATTCGGCC TTCATGGCCT ACTCAGCCTC      300
CCCAAGTAGC TGGGACTACA GCGGTGTGCC ACTATTCTCA GCTGATTTT GTATTTTATG      360
TGGAGACGGG TTTTGGCCAT GTTAGTTGGC CAGGATGGTC TCTCTCTCGA CGTCGTGATC      420
CGCCCGCCTC GGCCTCCCAA ATTGCTGTGA TGACAGGCGT GAGCCACCCC GCNTGGCNTG      480
TCCTACCTCT TTTTAAAGAC CTCTCCTGT AAGCACTGGA TAATCTACTT CTAGTAATGT      540
GAAACTGACT ATATNTTGAA TTCATATGTT TTCAATCAAC CTGTTGCAGT TTATATTCA      600
CACCTGCTC CCTTTTGACA GTTTAAGTAC AGATAGTCTC AGCAGTTCTG GAGACCATGT      660
AAAGCTCGAG      670

```

## (2) INFORMATION FOR SEQ ID NO:130:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

```

GAATTCGGCC TTCATGGCCT ACGACTCTGC TCTATTTACC ACTATCAGGC CAATCCTCCT      60
GACATGCTGT TAATATTTAG AAATATTCTT CCAACATTCA GAGTGCCTGG GTACCACACA      120
TGGATGCGAC TAAGATTCTT AAGTCTGGTT TCTAAGAGCT TCTTCAATGT CTCCAATAT      180
CTTTTCAGGC TCATGTTTGA GACCTTCCTT TCAAGAATAA TTGCTTGTG ATCTGGTTCA      240
AGCTGAACAG AGATTTTCAG ATGACTCCCA AACTATCTGC AACACATCAG CCCTATTAAC      300
TCTTCTCAGA ATGCTCATA AGAAGCCATG CCAGTGACA AAAGCCACTT CTGACACCTG      360
GCCCTGTCTG ACTCATGGAT TTCTCCAGG ATTGCTCTTT CTATCTGCTT TAAACCTCCT      420
TGCAATTGA CTTTCCTTGG CTCCAACCC ACTTTACTCG AG                          462

```

## (2) INFORMATION FOR SEQ ID NO:131:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

```

GAATTCGGCC TTCGTGGCCT ANATATTCTA AGCATTCAAT TTGTCAGTTT CTGAGATTTT      60
CTTTCCATCT TAGTTTTTTA GAAGTCAGAA AATGACTTTT CACATTCAGT TAGGGTATAT      120
AACAATGTTA ACGTAAGTTT ATGAGCTGAG TAGGTAGTTA ATAAACATCC TTTTAAGTTG      180
TAATGCTTTG AAATAGCATA TTAAAGGGTT GCAAGGGAAT ATTGGAACAT CAGTGTGAGT      240
TATTTTACAG TCATTTGTAG GTCTGTTTGT GACCTTGGCC TTTTCACACT TGTTTGTCTA      300
TCACCTTTAG TATATTACTC TTTGGCACAG GTTGTCTAAT CACATTAATT TTTGCATCAA      360
AAATCCCTTG GTTTAGTGAT TCTTAATGAT GTTTATTTTG GAAAGTCATG GACCTGAATT      420
CTTTGAGTAG TTCATGAAAA CCATATACCT TTCCCAGAGA AATGGGGTGC ATATAATTTT      480
AGGAAGTTCA AGGTAGGGAA AACAAGCTAA AAATCCCAAC TTATTTTCATC TCGAG        535

```

## (2) INFORMATION FOR SEQ ID NO:132:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

```

GAATTCGGCC TTCATGGCCT AAGGGGATCA TCAAAGATGT TGGACACCTT GTGTTCAAAT      60
CTTGTTTCAG GTGCGGCCTG TGCAGATCGG CTTTTTGGTT TGGTTGTCTT GGCCTGGATA      120
CCAGTGGAGA AGATGTCATC CATATCATCA TCAAATATAG ACTTGGTTTC CACTTTCTTT      180
TTGGAATTTT CTTTTGGTTT TACAGTTAAG TCAGCAAAGA TATCAATGTT ATCATCAAAT      240

```

```

AAATTAGATT CCAATGTTTT CTCCTTCTCT CTGGTTTTCT GAGAGGGTTT AATTGCTTCC 300
GTAGCAAATA TATCATCCTC AAAAATATCT TGTGTGTGTA ATATGACATC CTGCTGACTA 360
CTGGATTTTG TCTCATTCTT CTGACTTC TGATCCTCGA G 401

```

## (2) INFORMATION FOR SEQ ID NO:133:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

```

GAATTCGGCC TTCATGGCCT AGTAGATGAA CTAGAAGATG GATAAACGAA GATAGATAAA 60
ATGAAGAAAA ACAAAAGTCA AGGAGAACTC AGGCGTCCAA GAGTGTGTAA ACAACTTCTG 120
GTGTGAGACG CGCTACATTG CGCTAAATGG CCTGTGCGCT TCTGGTTTTT CCCTTCCTCT 180
GTTGATTTTT TATAGTTGTC TTTTATTTTA AACACGCCTC CCCCCCCCCT TTTTAAACTG 240
ATTTTACCAT CACTCTCTCT AGCCCTGCCT CCCTAGAATT AGCTGCTTCT TACCTCCCTT 300
GGATCTGGAA CTAAATATT AACGTGTATA TAAGTTAATA GTAAGTAGAC CGTGAATTTA 360
GAAGAGTAAA ACAGAATCAT GAGTACGTAG TCACTGTGGC CCCTTTTTTG CTGGATTTC 420
AGTTCGTAAG CATTTTGGGA AGAGAGTCGA AGGGGAAGGG GTGGCTTGCC AGTCAGTTGA 480
GTGATGCATG GCTCGAG 497

```

## (2) INFORMATION FOR SEQ ID NO:134:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

```

GAATTCGGCC TTCATGGCCT AGGCTGGTCA TTGAGAGTGT TGGTGCAATC AACTGGAAC 60
ACGATGTGAT TGGTAAACAT GTGCTTGATA CATCGAACAA AATATTCTGT CTCTGCTTCT 120
GTAAGTTGAA CAGGCTCAGA AGACTTGAAC AAGGGTCCTA TATTCAGAAA CTCAGGAATG 180
GCAGCCAATT GTTCTTGGGG ATATATTCTT AATGAAGTGC TAGACTATCC AATTACTTAA 240
TTTCTTATAC CTTTAGATAA TCAGTATGAA AAGTTCCCAT TTATAATGGA AATGAAAATT 300
CTTAACTAAA CTATACATGT AATATGTATT TCTAGAAGAG AATAAAAACC CAAGTCCTCG 360
AG 362

```

## (2) INFORMATION FOR SEQ ID NO:135:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

```

GAATTCGGCC TTCATGGCCT ACCCAATCA ATGGATCCTC AACTCCAAAT CCAAAGATAG 60

```

```

CATCTTCTGT CACTGCTGGA GTTGCCAGTT CACTCTCAGA AAAAATAGCC GACAGCATTG      120
GAAATAACCG GCAAAATGCA CCATTGACTT CCATTCAAAT TCGTTTTATT CAGAACATGA      180
TACAGGAAAC GTTGGATGAC TTTAGAGAAG CATGCCATAG GGACATTGTG AATTGCAAG      240
TGGAGATGAT TAAACAGTTT CATATGCAAC TGAATGAAAT GCATTCTTTG CTGGAAAGAT      300
ACTCAGTGAA TGAAGGTTA GTGGCTGAAA TTGAAAGACT ACGAGAAGAA AACAAAAGAT      360
TATGGGCCCA CCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:136:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

```

GAATTCGGCC TTCATGGCCT AAGCAAACCT CATGCAGCTG GTGGAAC TAG ATGTGTCTCG      60
AAATGAGATT CCTGAAATTC CAGAAAGCAT TTCATTCTGT AAAGCACTGC AGGTAGCTGA      120
CTTCAGCGGA AACCCACTGA CTAGGTTGCC AGAAAGCTTT CCTGAATTAC AGAATTTAAC      180
ATGTCTTTCT GTAAATGACA TCTCACTACA GTCTCTACCT GAAAATATTG GCAATCTTTA      240
TAACCTGGCT TCACTGGAAC TGAGAGAGAA TCTTCTTACA TATCTTCTG ACTCTCTTAC      300
CCAGCTGCGA AGACTAGAAG AACTTGACTC GAG

```

## (2) INFORMATION FOR SEQ ID NO:137:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

```

GAATTCGGCC AATGAAGCCT ACTTTAGTAT TTTGGCACTT CCTAATTGAC ACCTTGGGAG      60
ACTGCAGGAA GGAACGAGA ATCATTNNNTA GGNTATTGT GTGTGTGTGT GGTTTTTTTT      120
TTTTTTTGGG AGACAGAGTC TCACACTTTT GCCCAGGCTG GAGTGCAGTG GCGTGATCTC      180
GGCTCACTGC AACCTCTGCC TCCAGGGTTC AAGCGATTCT CTTGCCTCAG CTTCCCGAGT      240
AGCTGGGATT ACAGGCACAC GCCACAACGC CTGGCTAATT TTTATATTT TAGTAGAGAC      300
AGTCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:138:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

```

GAATTCGGCC AAAGAGGCCT AAACCTCAGAA TGGTGCTACT TGAAGACTCT GGATCTGCTG      60
ACTTCAGAAG ACATTTTGTG AACCTGAGTC CCTTCACCAT TACTGTGGTC TTACTTCTCA      120

```

```

GTGCCTGTTT TGTCAACAGT TCTCTTGGAG GAACAGACAA GGAGCTGAGG CTAGTGGATG 180
GTGAAAACAA GTGTAGCGGG AGAGTGAAG TGAAAGTCCA GGAGGAGTGG GGAACGGTGT 240
GTAATAATGG CTGGAGCATG GAAGCGGTCT CTGTGATTG TAACCACTG GGATGTCCAA 300
CTGCTATCAA AGCCCTGGA TGGGCTAATT CCAGTGCAGG TTCTGGACGC ATTTGGATGG 360
ATCATGTTTC TTGTCGTGGG AATGAGTCAG CTCTTTGGGA TTGCAAACAT GATGGATGGG 420
GAAAGCATTG TTGCAATCAC AATGAAGATG CTGGCGTGAC ATGTTCTGAT GGATCAGATC 480
TGGAGCTAAG ACTTAGAGGT GGAGGCAGCC GCTGTGCTGG GACAGTTGAG GTGGAGATTC 540
AGAGACTGTT AGGGAAGGTG TGTGACAGAG GCTGGGGACT GAAAGAAGCT GAACCTCGAG 599

```

## (2) INFORMATION FOR SEQ ID NO:139:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 541 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

```

GAATTCGGCC TTCATGGCCT AACCTTCCTG AATATCTGCC GTTGTCTCTG CAAGAAATAA 60
CTAGTCAACC CAAAAGGCAG TATCTTTTAC TTCATTCCTT GAAGGAAATT ATTAGCTCTG 120
CATCAGTGGT GGGCCTTAAA CCATATGTTG AAAACATCTG GGCCTTATTA CTAAGCACT 180
GTGAGTGTGC AGAGGAAGGA ACCAGAAATG TTGTTGCTGA ATGTCTAGGA AAACCTCACTC 240
TAATTGATCC AGAAACTCTC CTTCCACGGC TTAAGGGGTA CTTGATATCA GGCTCATCAT 300
ATGCCCCAAG CTCAGTGGT ACGGCTGTGA AATTACAAAT TTCTGACCAT CCACAACCTA 360
TTGATCCACT GTTAAAGAAC TGCATAGGTG ATTTCTTAAA AACTTTGGAA GACCCAGATT 420
TGAATGTGAG AAGAGTAGCC TTGGTCACAT TTAATTCAGC AGCACATAAC AAGCCATCAT 480
TAATAAGGGA TCTATGGAT ACTGTTCTTC CACATCTTTA CAATGAAACA AAAGTCTCGA 540
G 541

```

## (2) INFORMATION FOR SEQ ID NO:140:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 403 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

```

CTTCATGGCC TAGTGGTTCT TCTGAAATCG GCCTTCAGAC ACCTGTCTTT GGTAGTACCA 60
ATATCTAAGA AGTGGTTTCA GTTCAATTTT GTTTTCCTCC ATGCCAGAGA GAAGCCACAG 120
TTTCCTAAGC TGGGGAGGAG GTATATCCTT CAAGAGATCG GCTTGTAGA ATAGACCACT 180
TAACACCATA TGA AAAAGCA ACAGACTGAA ACATGGATGT CCTCAAGAAG GGCTGCTGAC 240
ACCTATGATT TGGCAAGGAG ATAAATAACA GAATGTGCAA AGGGTCATAA GAGTGCAGAC 300
ACCCTAATGT CTGTTGGCTG GAAGGTCAGA GCAGTTCACC AGTGAAAATG GGTACGCCAT 360
GAAGGCCGGC CTTCATGGCC TATAGGCCAT GAAGGCCGAA TTC 403

```

## (2) INFORMATION FOR SEQ ID NO:141:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 439 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

```

GAATTCGGCC TTCATGGCCT AGTCCTCATC TGCTGGCATT TTGTGGGGTG TTAGTGCCAA      60
ACTTGAATAG GGGCTGGGGT GCTGTCTTCC ACTGACACCC AAATCCAGAA TCCCTGGTCT      120
TGAGTCCCCA GAACTTTGCC TCTTGACTGT CCCTTCTCTT CCTACCTCCA TCCATGGAAA      180
ATTAGTTATT TTCTGATCCT TTCCCTGCCC TGGTCTAGCT CCTCTCCAAA CAGCCATGCC      240
CTCCAAATGC TAGAGACCTG GGCCCTGAAC CCTGTAGACA GATGCCCTCA GAATTGGGGC      300
ATGGGAGGGG GGCTGGGGGA CCCCATGATT CAGCCACGGA CTCCAATGCC CAGCTCCTCT      360
CCCCAAAACA ATCCCGACAA TCCCTTATCC CTACCCCAAC CCTTTGCGGC TCTGTACACA      420
TTTTTAAACC TGGCTCGAG                                     439

```

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

```

GCGATTGAAT TCTAGACCTG TGTGTCTAGC TGTGATGGAA TCTGAAATGA AGTTTGACAA      60
GGACCATGAT GGAATCATTG AAAATGGAGG CTATGCAGAC CAGACCTATG ATGGATGGGT      120
GACCACAGGC CCCAGTGCTT ACTGTGGAGG GCTGTGGCTG GCAGCTGTGG CTGTGATGGT      180
CCAGATGGCT GCTCTGTGTG GGGCACAGGA CATCCAGGAT AAGTTTTCTT CTATCCTCAG      240
CCGGGGCCAA GAAGCCTATG AGAGACTGCT GTGGAATGGC CGCTTACTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

```

GAATTCGGCC TTCATGGCCT AGGGAGGCTG AGGTGGGAGG CTCACTGGAG GCCAGGAGTT      60
CGGAACCAGC CTGAGCAACA TAGGGAGACC TCAGCTCTAC AACTGAAAAA AAGATAGCCA      120
GGTGTGTTCA TGGTGGCACC TGTCTGTATT CCAGCCGCTT GGGAGGCTGA GGCAGGAGGT      180
TTGCTTGAGT CCAGGAGTTT GAGGTTGCGG TGAGCTACAC AATGAGCTAT GGTGGCACTA      240
CTACACTCCA GCCTGGGCCA TAGAGTAAGG CCCTGTCTCT AACTGGAAGT CCAAAGAGGG      300
ATCTACTTCC TAGACTATTA ATTTAATAGA TCAATAAATT AATCAAGAAT ATGATTTTTT      360
TCTCATCTTT CTCTGTAGTC ATATTTTATA CAGACTTTT GTTTAAGTAA TCTCTCTTTA      420
TGGGCAGACA ATGATTTCAG AACACCCCTG CCTCGAG                                     457

```

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

```

GAATTCGGCC TTCATGGCCT AGTCAGCCGT GACTGCACCA CCATACTCCA GCCTGGGTGA      60
CAGAGCGAGA TCTTGTCCTTA AAACAAAACA AAACAAAACC CAGACTTCCT ATAATTCCTA      120
AAAATAAATG TGGGTTTGAG AGGCCTACCT TGAAATGTAC AAGATCCTGG CCAGACTTCA      180
CCTATCTAAC AATATGCTAG TAACTATTTG TTGACATGTC TTAAGAAAT GTTCATCAGG      240
GCCTCAGAAA GCAAGGCAGA GAACAGGTCC CTGAAATTTA CTAGCTTGCA CCAAACCATC      300
AGATAAAGAT AGGTTAATAT TTGACAGAAA AAACCTTTCA AAAAGAGACA GTGAAATACT      360
CTTGAGATGA ATCCAGGCGG CTCTCGAG                                     388

```

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

```

GAATTCGGCC TTCATGGCCT AGGCAGTGGA GGCCTCTGTA ATTCTAGCAT ACAGGTGGCA      60
AGTTATTACA TTATTCTTTT CTCCTGTCT ACCTGCAGTT GGTTTTATGT GGGGCGTTAG      120
TACACTTCCC AAAGGGCTTG CCGCAGGTG AGAGGTGCAC ATTGAATCC CTCACCGGC      180
AGATGGGAAG TGTGGCCATG AGAGAGAGCT TCAGGGGCCC TGGGTTTATG ACATCGCTGG      240
GCCAGGAATG AGGTTAATAT TTTAATGGC GAAGGGTGAG CCCCCTTATT ACCCGAGCTC      300
GAG                                     303

```

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

```

GAATTCGGCC TTCATGGCCT ACTGGATGGC ATCTACTTCG TATGACTATT GCAGAGTGCC      60
CATGGAAGAC GGGGATAAGC GCTGTAAGCT TCTGCTGGGG ATAGGAATTC TGGTGCTCCT      120
GATCATCGTG ATTCTGGGGG TGCCCTTGAT TATCTTCACC ATCAAGGCCA ACAGCGAGGC      180
CTGCCGGGAC GGCCTTCGGG CAGTGATGGA GTGTCGCAAT GTCACCCATC TCCTGCAACA      240
AGAGCTGACC GAGGCCCAGA AGGGCTTTCA GGATGTGGAG GCCCAGGCCG CCACCTGCAA      300
CCACACTGTG ATGGCCCTAA TGGCTTCCTT GGATGCAGAG AAGGCCCAAG GACAAAAGAA      360
AGTGAACAA CTCGAG                                     376

```

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

|             |             |            |            |            |            |     |
|-------------|-------------|------------|------------|------------|------------|-----|
| GAATTCGGCC  | TTTCATGGCCT | AATGGAAAGG | ACAAGGAAAA | GGGAGAAGGG | GTGAGAGTCT | 60  |
| GTCCCTAGGGG | CCAACGAGAA  | CAGTGAGCTG | TTTCAGGGGA | GCCATTTCTT | TGTCCATGCT | 120 |
| CACAAGCCTG  | TGGATTCTTC  | CCCCTCTGCA | GGAAATTACC | TGATGTTCCA | AACCCCTCC  | 180 |
| AGATCCTGTA  | TATCCGCAGC  | ATCTCCCCTT | TCCCTGAGCT | GGAACAGTTT | CTACAGGACA | 240 |
| CTATCAAGAG  | GTACTAGGGG  | CCTGGAGGTT | TGGGCTCCAA | GAGAAGCTTG | ACAGAGCCCA | 300 |
| CGCCCGACCC  | CTACTTCTGT  | TTCTTCCTAA | GGTATAATCT | GCAGATGTTG | GAAGCTGAGG | 360 |
| GCAGCATGAA  | GCAGGCCCTG  | GGTGAAGTGC | AGGCACAGCA | GCCCCCTCG  | AG         | 412 |

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| GCCTGGCCAT | CCGGAGAGCT | AAGAACCTCA | GGCGGCTGCT | GTACGTNTCA  | TGCAACCCCC | 60  |
| GGGCAGCCAT | GGGCAACTTT | GTGGACCTCT | GCAGAGCCCC | ATCTAACC GG | GTGAAGGGCA | 120 |
| TTCCCTTCCG | GCCGGTCAAG | GCTGTGGCAG | TGGACCTGTT | CCCGCAGACC  | CCTTCTTTT  | 180 |
| TCATACTTAT | ATGAAAGACT | ACATACTTAA | AATACTGGTG | ATTATATTTA  | GGACCTGAAA | 240 |
| TCATAAGATT | GTGGTCTTGC | TTTTTACTTA | TTTTTGTATC | TTAGCGATGT  | CTAGAGTTAA | 300 |
| TAAGTGTTGC | TTTTCTAATC | ACAGCAAATC | TCGAG      |             |            | 335 |

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

|            |             |            |             |             |            |     |
|------------|-------------|------------|-------------|-------------|------------|-----|
| GGATTCGGCC | TTTCATGGCCT | AGTGGGGCAC | TAGGATCATC  | ATTGTTGGTGA | GAGCCCTCGG | 60  |
| CAATGGTGGA | GAGGGAGAAG  | TTATCATTGT | GGAGCTCAGA  | TGGGGTCCGG  | AATTTGTTGG | 120 |
| TCCTACGCAG | CTTGGTATTG  | TCCGTCTTGA | GCAGGTAGAG  | CTTCTTGGCA  | AAGAACACCG | 180 |
| TCATCATGAA | GAGCAGGAGC  | AGGACGAGGG | CAGCCGAGCC  | CACGGCCACG  | CACATCACCT | 240 |
| GGAAGTCGGT | GATGATGGAC  | TCGCAGCGCA | TCCCCTTG TG | CCAGATGTAG  | TCCTGCGTGT | 300 |
| TGCACCTGCA | GAAGGCCCTT  | ATGTTCTCCA | CCAGGTAGCA  | CTGGCCGCCA  | TTGTGACAGT | 360 |
| AACTTGGGAA | GAGGTGCGAC  | ACTGACCGGC | AGGAGCCGTT  | ATGCCGCACA  | AAGCCACTGC | 420 |
| GGCACTCAGT | GCCATTTTCA  | CTGGAGGCCA | AGTCCCTGCC  | TGGCTCTCCT  | TAGGCCATGA | 480 |
| AG         |             |            |             |             |            | 482 |

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

|           |            |            |            |            |            |     |
|-----------|------------|------------|------------|------------|------------|-----|
| GTTCTTACT | AACTTTAATG | GCCACAACAT | TTAGGCGAAA | GGGGGGCAAT | CATTGGTGGT | 60  |
| TTGGCATT  | CGAGACTTC  | TGTCAGTTT  | TGCTTGAAAT | TTTCCCATTT | TTAAGAGAAT | 120 |
| ATGGGAAC  | ATTCATATG  | ATCCATCAG  | AAGATAGTGA | AGATGCTGAA | GAAACATCAG | 180 |
| TTCCAGAAG | CTCCGAAAAT | GCTCCAATAT | TGGGAAAGAA | GGCCAGAGTA | GTTATAACCC | 240 |
| AGAGCCCTG | GAAATACGTT | CCCCCCTCT  | CCTCGAG    |            |            | 277 |

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

|           |            |          |            |           |           |     |
|-----------|------------|----------|------------|-----------|-----------|-----|
| GCTCGCCAC | TTTATGAAGA | GCGATTTT | CACGGCTTGA | ACCATTGAA | TTTGGATTG | 60  |
| TGTTTCCAG | CACTTAAAG  | GTTCCTT  | TACCTAGT   | AGATTGGT  | CAGGTCTGT | 120 |
| TTCTCCAG  | ATGACCGT   | GTGCTG   | AGCTTGG    | CTTGGTGT  | CCCCTGGCT | 180 |
| ATGGCTTCA | GCCTGACCT  | GTGCTGGT | GGGCGCC    | TGGCCATGG | CTGCAGGGC | 240 |
| CCCACGCTG | ACTCCTGG   | CTG      |            |           |           | 272 |

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

|           |           |           |           |           |           |     |
|-----------|-----------|-----------|-----------|-----------|-----------|-----|
| GAATTCGGC | TTTATGGCT | AGGGGCGGT | GAACGTCCT | GAGAGCGTC | AGCTCGTGG | 60  |
| CGAGAGGAG | CTCGGCTCC | CCACGCTGA | GGCCGTGG  | CGCTCCCTT | AAAAGTTGA | 120 |
| ACGGCCGCG | TTTGGGACG | CTGGCGGGA | GGAGGGCCG | ACGAGGGG  | GCTTCAGGG | 180 |
| CAACTGGGG | TTCTCGACG | CCACCCTTT | CAGGGCGCG | CCCCGGTAG | CCTCGGGCC | 240 |
| GCCCAGGT  | ACAGGCTG  | TCCCGGGAC | CCCGGAGTA | CTGGAGGG  | CTCCCGAGG | 300 |
| GACTCGAG  |           |           |           |           |           | 308 |

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

|            |             |            |            |             |            |     |
|------------|-------------|------------|------------|-------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT  | ACAATCCCAA | ATGTAGGATC | ATGCCCCATTG | CCCTAAGCCC | 60  |
| AGGCATGAGA | GTCGACATCT  | CTCCTCTTAT | ATACAGATCC | AGTCCACAGG  | TGAAGTGGGA | 120 |
| ACTCTCCAAC | CAGGATTACAG | CACACCATTG | ATGTTGCGAC | TCCTCTACTG  | GAACACAGCT | 180 |
| TGGAGAAGGG | ATTGGGGCTC  | TCATGGCAGG | ATGCAATCCA | CTGTTGAGAT  | TGTGACTCAT | 240 |
| GCACTTGAAC | CTAAGTCTCA  | GGAGTTGTTG | ACTCTTACAC | CCAGCACCCA  | GGTGATAGGA | 300 |
| CTCTCATGTC | TGGTTCCTGC  | CCACAGGTGA | AATTGTGACA | TATACATGGT  | CACAGCTCAC | 360 |
| AGGTGAGGTG | ATAACTCACA  | TACCTGGATC | CAGCTAAGAG | AACAGATTTT  | GACTCTGATA | 420 |
| TCTTAGGCCA | TGAAGGCC    |            |            |             |            | 438 |

## (2) INFORMATION FOR SEQ ID NO:154:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCT | TCATGGCCTA | CAAGATGACT | AAAGTCTTCA | CTCACCAAGG | AAAAGTGGCT | 60  |
| CTGIATGGCA | AGCTGGTGCA | GTCAGCTCAG | AATGAGAGGG | AGAAACTTCA | AATAAAGATA | 120 |
| GATGAGATGG | ATAAAATACT | TAAGAAGATC | GATAACTGCC | TCACTGAGAT | GGAAACAGAA | 180 |
| ACTAAGAATT | TGGAGGATGA | AGAGAAAAAC | AATCCTGTGG | AAGAATGGGA | TTCTGAAATG | 240 |
| AGAGCTGCAG | AAAAAGAATT | GGAACAGCTG | AAAAGTGAAG | AGGAGGATGC | TCTCGAG    | 297 |

## (2) INFORMATION FOR SEQ ID NO:155:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 395 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAATTTAGGA | AGGTCAAACG | TGAATCTCCA | TTTGACAAAC | 60  |
| GTCCAACTGC | AGCAGAGATT | AAAGTGGAAC | CCACCACTGA | GTCATTGGAC | AAAGAGGGCA | 120 |
| AAGGTGAAAT | TAGAAGCCTA | GTGGAGCCAC | TCAGTATGAT | CCAATTGAT  | GATACTGCTG | 180 |
| AGCCACAGAA | AGGAAAAATA | AAAGGAAAGA | AACACCATAT | CTCTTCAGGA | ACTATCACAA | 240 |
| GCAAAGAAGA | AAAAACTGAA | GAGAAGGAAG | AGTTGACCAN | ACAAGTCAAG | TCTCATCAAC | 300 |
| TTGTTAAATC | ACTCTCAAGA | GTGGCTAAAG | AGACTTCAGA | ATCTACCAGA | GTTCTAGAAA | 360 |
| GTCCAGATGG | CAAAAGTGAA | CAGCGTAACC | TCGAG      |            |            | 395 |

## (2) INFORMATION FOR SEQ ID NO:156:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 422 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

```

GAATTCGGCC TTCATGGCCT ACAGAGTACT GAGTGGAAACA TACGATGATA GATTTCACAA 60
TAATGTAGCA TACTTCTACT TCATTGTATC TTAAGTTTCT TGAAATATTG CTA CTGAGAGA 120
TTGGAAAGAA ATCTTAATGT TATGGGGTAT TGTCTAAGAA GCTTTATTTT AAAACCATCT 180
CATTAAATTT TGTTCATTT TAGATAATCG TCCCAGATG CCATGTTACC CTAGTGCAGA 240
GTTTGGGGCT GGATAAGTTT TTGTTGTAGG TGGCTATCCT GTGTTTTGTA GGGTATTAG 300
CAGCATCCTG GCCTTAAAC AAAAATGTTT TCAGACATTG CCAAATGTCC CCCGAGCGGT 360
AAAGTCACCC CCAAGTTGAG AACCGCTCTA TACAAAGAGC TGTATTAGA GCCAGACTCG 420
AG 422

```

## (2) INFORMATION FOR SEQ ID NO:157:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 492 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

```

GAATTCGGCC TTCATGGCCT AGATTGCTTG AGGCCAGAAG TTCAAGACAG GCTGCCCAAC 60
ATAGTGAGAC CCCCTTCTCT ACCAAAATT TAAAAATGAG CATGCATCTG TAGTCCTAGC 120
TATTGGGAAG GCTGAGGCAG GAGGATCATC TGAGCCCAGG AGTTTGAGGC TGCAGTGAGC 180
TAAGAAGGTG CCACTGCACT GCTGTTGTCT CTCAGCAGAT CATTTCAGC TTCTTTGGA 240
GAGTAGCCAT TAGCAATGCA AATGTGAAGT TTGATAGCAC AATAAATAAA ACACTGAAAA 300
CTGTAGATGT TACTTATAAA AACTGGGCAC TCAGATAAAT TGGGTTTGGT CAAGAAGACA 360
GTGAAGCATA TCCCTGTTGG GCCAGAGGCT GTTATCGTTT TGCTCTGAAT TCAAAACCTG 420
ATATGTCTCC AAATTTGCTT AGGGTTGTTA TCCTGGAAAA TAGAATCTGA TAGAAGGTGG 480
GCACATCTCG AG 492

```

## (2) INFORMATION FOR SEQ ID NO:158:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 505 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

```

GAATTCGGCC TTCATGGCCT ACTGCTTTCG TGAAGACAAG ATGAAGTTCA CAATTGTCTT 60
TGCTGGACTT CTTGGAGTCT TTCTAGCTCC TGCCCTAGCT AACTATAATA TCAACGTCAA 120
TGATGACAAC AACAAATGCTG GAAGTGGGCA GCAGTCAGTG AGTGTCACAA ATGAACACAA 180
TGTGGCCAAT GTTGACAATA ACAACGGATG GGA CTCTGG AATTCATCT GGGATTATGG 240
AAATGGCTTT GCTGCAACCA GACTCTTCA AAAGAAGACA TGCATTGTGC ACAAAATGAA 300
CAAGGAAGTC ATGCCCTCCA TTCAATCCCT TGATGCACTG GTCAAGGAAA AGAAGCTTCA 360
GGGTAAGGGA CCAGGAGGAC CACCTCCCAA GGGCCTGATG TACTCAGTCA ACCCAACAA 420
AGTCGATGAC CTGAGCAAGT TCGGAAAAAA CATGCAAAAC ATGTGTCGTG GGATTCCAAC 480
ATACATGGCT CAGGAGATGC TCGAG 505

```

## (2) INFORMATION FOR SEQ ID NO:159:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 373 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGCCGGAGCA | GCTGTCTGGG | AGTCAAGGCT  | GCAGTAGCGT | 60  |
| TTCTTCATGG | GGTGCTCCAG | GGGGTGCCAC | AGACCGACAG | GCAGCCCCAAG | GGCCTGGACA | 120 |
| CCCCTCCCCA | GGCAGGTGCT | CCCCCAGGAG | GACTGTCTCT | GGGAATGAAC  | CTCCCGCGGG | 180 |
| CTTTGGACTG | AGGTCCCTGT | GGCCTCGGTC | TCCTCCCCAT | GAAGTGGGAG  | CGAGGCTCCC | 240 |
| CAATGGTGCT | TTTGGCTTTA | GTGTACGATG | TTTGCTGTGC | TTCCCGCCGT  | GGAGGGCAGA | 300 |
| GCCACCCAC  | ATCAGGATCG | GACGTGCTAC | CCCTCCCGGT | CCCGGCCCTG  | GCCCAGCCAG | 360 |
| CCCAGCCCTC | GAG        |            |            |             |            | 373 |

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 362 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCA | AAGAGGCCTA | ATGAATTCTC | TGATCACAAA | ACAGACCCAG | GAAAGCATTG | 60  |
| AGCATTTTGA | GCGACAGGCA | GGGCTGAGAG | ATGCTGGCTA | CACACCCAC  | AAGGGCCTCA | 120 |
| CCACCGAGGA | GACCAAGTAC | CTTCGAGTGG | CCGAAGCACT | CCACAACTA  | AAGTTACAGA | 180 |
| GTGGAGAGGT | AACAAAAGAA | GAGAGGCAGC | CTGCATCAGC | CCAGTCCACC | CCAAGCACCA | 240 |
| CTCCGCACTC | TTACCTAAG  | CAGAGGCCCA | GGGGCTGGTT | CACCTCTGGT | TCTTCCACAG | 300 |
| CCTTACCTGG | CCCAATCCT  | AGCACCATGG | ACTCTGGAAG | TGGGGATAAG | GACGGGCTCG | 360 |
| AG         |            |            |            |            |            | 362 |

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 419 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGTTTACAA  | AACGCGATTT | GTAATATAAA | CTAGTTAGAT | 60  |
| AACTCAGAGG | GTTTATATGG | CCATATTTT  | GTTTATGCTT | TGTCACAGGC | TTTAGTCATT | 120 |
| GCTTCCATGT | GTTTTCATCC | TTCAGGATAT | CTTCAAGAAG | CCTACTTATG | GACCAAACAA | 180 |
| GTTCTGACCA | TCATGGAGAA | ATCTCTGGTC | TTGCTCAGGG | AGGTGACGGA | TGGCTCCCTC | 240 |
| TATGAAGGAG | TTGCGTATGG | CAGTACACC  | ACTAGATCAC | TCTTCCAATA | CATGTTTCTC | 300 |
| GTCCAGAGGC | ACTTCAACAT | CAACCACTTT | GGCCATCCGT | GGCTTAAACA | ACACTTTGCA | 360 |
| TTTATGTATA | GAACCATCCT | GCCAGGTATA | GTGAGGAGTC | AGAAGTGTGA | AAACTCGAG  | 419 |

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 261 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

|  |     |
|--|-----|
| GAATTCGGCC AAAGAGGCCT ACAGGTAGTA TCTTTATAGC GGTATAAAAA CAGACTAATA  | 60  |
| CAAAACAGGTA GCTCTAAATT GTGAGTTTTT CTTAACTCCT TTGATCTTCT GTGATAGCGA | 120 |
| TTTTTCACAT TTCACACTTC CCTAATGCCA AAAATCCACC TCCAGCAGCT GTTTTGCCTC  | 180 |
| TTTCTTATCC TGCCCTTGG AAGAATGTCA TCATTATTGC TGCCACAGCA CTGTGTTCTT   | 240 |
| TTTCAGAAGT TACAGCTCGA G  | 261 |

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

|  |     |
|--|-----|
| GAATTCGGCC AAAGAGGCCT AGTGGTCTGG GGCAAAATT AGTAAGACCT GGAAAGCATA | 60  |
| GGTAATCAAA GCAGAAACTG ACAAATGAGA TGGTATCAAG CTAAAAAG             | 108 |

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 292 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGTTAACCT CATCAGACAT TATTGCAGCC AGCTGTCAGC  | 60  |
| CAAGCTCAGT AACCTTCAA CGCTCATTTT CATGAGGCTA GAGTTCCIGA GAATCCTCTG  | 120 |
| TAGCCATGAG CATTACCTCA ATCTGAACCT TTTTATTATG AATGCTGATA CTGCTCCAAC | 180 |
| ATCTCCTTGT CCTTCCATAT CTTCCAGAA CTCAAGCTCC TGCTCCAGCT TCCAGGACCA  | 240 |
| GAAGATCGCC AGCATGTTG ATCTGACTTC CGAGTACCGC CAGCCCCTCG AG          | 292 |

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

GAATTCGGCC AAAGAGGCCT AGCAAAACT GTTCAAAGA GTTGTGATT ACTTTCATT 60  
 CCACTTTC ACCTTCATTC TCCCCTCAAT TAACTCTCT TCATCCCAT GATGCCATTA 120  
 TGTGGATTCC TCGAG 135

## (2) INFORMATION FOR SEQ ID NO:166:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 449 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

GAATTCGGCC AAAGAGGCCT AGAAAAAGTA GCACAGTGA GTCTGAAATA GCAAGCGAAG 60  
 AGAAAAGCAG AGCTGCTGAG AGGAAAAGGA TTATTATTAA GATGGAGCCA GAAGATATTC 120  
 CTACAGATGA ACTGAAAGAC TTTAACATTA TTAAAGTTAC TGATAAAGAC TGTATGAAT 180  
 CCACTGACAA TGATGAATTA GAAGATGAAC CTGAAGAGCC ATTTTATAGA TACTATGTTG 240  
 AAGAAGATGT CAGCATAAAA AAAAGTGGTA GGAAACTCT AAAACCTCGA ATGTCAGTAA 300  
 GTGCTGATGA AAGAGGTGGT TTAGAGAATA TGAGGCCCCC TAACAACAGC AGTCCAGTAC 360  
 AAGAGGATGC TGAAAATGCA TCTGTGAGC TGTGTGGACT TACAATAACC GAGGAGGACC 420  
 TGTCTCTCA TTACTTAGCC AAATCGAG 449

## (2) INFORMATION FOR SEQ ID NO:167:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 565 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

GAATTCGGCC AAAGAGGCCT AAAAGGAAAC TTGGACAAGT AGAAAGTGA TGACCCAGGC 60  
 TCCGTTACAT ATACTTGGAT TCCAGCTGGG ACCTAGATTT GCTGAGGACG GAAGCCAAGG 120  
 AGACAGGAAC ATGTGGCTGC TCCAGCTCT ACTCCTTCTC TGCTCTCAG GCTGTTTGTC 180  
 TCTGAACGGC CCGGCTCTG TGAAGGAC TCGGGGGGAC TCTCTGACG TGTGGTGTCA 240  
 GTATGAGAGC ATGTACAAGG GATATAACAA GACTGCTGC CGAGGACAGT ACGACACGTC 300  
 ATGTGAGAGC ATTGTGGAGA CCAAGGGAGA AGAGAAGGTG GAGAGGAATG GCCCGTGTGTC 360  
 CATCAGAGAC CACCCGGAGG CTCTCGCCTT CACTGTGACC ATGCAGAACC TCAATGAAGA 420  
 TGATGCTGGA TCTTACTGGT GCAAAATTCA GACAGTGTGG GTCCTGGATT CATGGTCACG 480  
 CGATCCCTCG GACCTGGTTA GGGTGTATGT TTCCCAGCA ATTACAACCC CAAGGAGGAC 540  
 CACACATCCA GCCACCCCGC TCGAG 565

## (2) INFORMATION FOR SEQ ID NO:168:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

```

GAATTCGGCC AAAGAGGCCT AGTTTCCTTT ATATGTTTGC ACTTAATTTG ATTCCATCCT 60
TCATGCTGTT TTCATTATTC TTAGTTCATC TACACCACAT AAATTATCAC CTTTGTTTTC 120
AGTTCGCCAA TTTCCATGTG CCACAAACAA ATCTCGAG 158

```

## (2) INFORMATION FOR SEQ ID NO:169:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 383 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

```

GAATTCGGCC AAAGAGGCCT AGTCTACCA TCTATTCTAA ACCTTATATT ATCAATCCTA 60
TTCCCTCTCA CCAAAGAAT CCCTTTATAC AAGTAATTAT CCTGTCTATG TCTTTCAACT 120
CTAGTTTCCC CACTGCAACT CTTCCTTAA TATATGTACC TGCTCTGTTA TCCCTCTCCA 180
GCTACTTCCC TATTTTCTGT TCCCTTTAC AGGAAAACCT TTCTCCAGCA TTTCCCAATG 240
CCATTGTCTT ACTTCCTCAC ATTCTATTTT CTTCTCAAAC CATTTTATT AGGCTTCTTT 300
CCCAATGGC TATTGTCAAG CTTCACTTAA TGCCGTGCAA ATCACCTAT TCTCCAGGTC 360
TTCTTCTTC CAGTCTCTC GAG 383

```

## (2) INFORMATION FOR SEQ ID NO:170:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

```

GAATTCGGCC AAAGAGGCCT AAATATTGTC TGAAAAAAT ATATGAGACC CATTACTCAG 60
TCTCTCCTCC TGCCATTAT ACTGCAGGTA TTCCCAAGT TTCTCTTCTC AACCTTTGCC 120
TCCTTTTCCC TGCTTGCTCC CTTAGTTTTC TCCTCTGGGT GGATGACTCC CAAATCTAGC 180
ACTGACCTGT TTGTCCACAT CCTTGAGTAT CCCACCACCA TTTACACCC AGCATATCCA 240
GATGGAGCTC TTATCAGTTG TAACAGCACT GCTCAATTCG AG 282

```

## (2) INFORMATION FOR SEQ ID NO:171:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

```

GAATTCGGCC AAAGAGGCCT AGTGGAAGAG AAGAATGTTT CTGTCTCTTC CTACGTTGAC 60
TGTTCTTATT CCACTGGTTT CTTAGCAGG ACTGTTCTAC TCAGCCTCTG TGGAAGAAAA 120
CTTCCACAG GGCTGCACTA GCACAGCCAG CTTTGCTTT TACAGCCTGC TCTTGCCTAT 180
TACCATACCA GTGTATGTAT TCTCCACCT TTGGACTTGG ATGGGTATTA AACTCTTCAG 240

```

GCATAATTGA TGCAACTAGA GTCAATATGC TGTATATATT AATGATAGCT CTGGGGCATC 300  
GATCTCTGAA AGCTCAAATG GATGGAATTT AGTTTGCGGG AACTCTCGAG 350

## (2) INFORMATION FOR SEQ ID NO:172:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

GAATTCGGCC AAAGAGGCCT AGGGGTGTAC ATTTTATTGG AAACCTTAAA TACTGTTCAG 60  
AAAGAATATA TCTTCAATCA AGGCTCTTGT GCAGCCTACA CAGAAAAATG AAGCTTTTGG 120  
GGTTAGGTGC AACGCTCGAG 140

## (2) INFORMATION FOR SEQ ID NO:173:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

GTGGTCTCTC CTCCCTGCC ACTCCCTCT TCTTTTTTTT CCAACATGGC CTGCTCCGC 60  
GTACATCGCC ACCCAGGGAC CGCTGCCC GC CACCGTGGCT GACTTTTGGC AGATGGTGTG 120  
GGAGAGCGGC TGCGTGGTGA TCGTCATGCT GACACCCCTC GCGGAGAACG GCGTCCGGCA 180  
GTGCTACCAC TACTGGCCCG ATGAAGGCTC CAATCTCTAC CACATCTATG AGGTGAACCT 240  
GGTCTCCGAG CACATCTGGT GTGAGGACTT CCTGGTGAGG AGCTTCTATC TGAAGAACCT 300  
CGAG 304

## (2) INFORMATION FOR SEQ ID NO:174:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

GCGATTGAAT TCTAGACCTG CCTCTCTTAT ACCTCGGTGT GGCCGAAAGG AAATAAGCAG 60  
AGGCGCTATT GGCAGGACCT AGAACTTTC CTTGTAACAT AGCTAGTATG TTCCCTCTGC 120  
CCCTTCTTCA TCTTTTCCTC ACACTTGCTG GAGCTGGAGC AGCTATCCTG ACCGCAAGTG 180  
CACTCGAG 188

## (2) INFORMATION FOR SEQ ID NO:175:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACTATCTGCC | TTGGCGTCCC | ACTGCCCTGA | CCTGTGCCCT | 60  |
| CTCACAGGCC | CCCGTGATGG | CTCGCTGGCC | TCCCTTCGGC | CTCTGCCTCC | TCCTGCTGCT | 120 |
| GCTGTCCCCA | CCGCCACTGC | CCTTGACAGG | GGCCCATCGC | TTCTCCGCAC | CTAATACCAC | 180 |
| TCTCAACCAC | TTGGCACTGG | CACCTGGCCG | AGGCACACTC | TATGTCGGCG | CAGTGAACCG | 240 |
| CCTCTTCAG  | CTCAGCCCCG | AGCTGCAGCT | CGAG       |            |            | 274 |

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GGTCAGCCGA | GCATGATAGG | AGACATCATC | AACCTCGGCC | TGAAAGGGAG | GGAGGGGAGA | 60  |
| GCAAAGGTCG | TCAACGTGGA | GATCGTGGAG | GAGCCCGTGA | GTTATGTCAG | CGGGGAGAAG | 120 |
| CCGGAGGAGT | TTTCCGTCCC | ATTCAAAGTG | GAGGAGGTG  | AAGATGTGTC | GCCAGGCCCC | 180 |
| TGGGGTTGG  | TTAAGGAGGA | GGAAGTTAT  | GGAGAAAGCG | ATGTCACATT | CTCAGTTAAT | 240 |
| CAGCATCGAA | GGACCAAGCA | GCCTCAGGAG | AACACGACTC | ACGTGGAAGA | AGTGACAGAG | 300 |
| GCAGGTGATT | CAGTGGGCGA | GCTCGAG    |            |            |            | 327 |

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AAGCAATGTC | TCCACCACTG | CTGCTGCTAC | CCTTGCTGCT | 60  |
| GCTGCTGCCT | CTGCTGAATG | TGGAGCCTGC | TGGGGCCACA | CTGATCCGGA | TCCCTCTTCG | 120 |
| TCAAGTCCAC | CCTGGACGCA | GGACCTGAA  | CTACTGAGGG | GATGGGGAAA | ACCAGCAGAG | 180 |
| CTCCCCAAGT | TGGGGGCCCC | ATCCCCTGGG | GACAAGCCTG | CCTCGGTACC | TCTCTCCAAA | 240 |
| TTCTTGATG  | CCCAGTATT  | TGGGGAAATT | GGGCTGGGAA | CGCCTCCACA | AAACTTCACT | 300 |
| GTTGCCTTTG | ACACTGGCTC | CTCCAATCTC | TGGGTCCCCG | CCAGGAGATG | CCACTTCTTC | 360 |
| AGTGTGCCCT | GCTGGTTCCA | CCACCGCTTC | AATCCCAATG | TCCTCGAG   |            | 408 |

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGGAGGAATT | TCCATCTTGC | TCTCAAAGTG | AGTCTGAATG | 60  |
| TGCTCGGTGG | TGTCACCCCC | GCCGAGCTGC | CAGTGCAGAA | GGCCACTATT | GAATCCTGTC | 120 |
| ACACGCCCCA | ACTTGTGAGA | TCGGTCAACA | ACAAACAGGT | TGTTCTTTTT | GACTATCTTT | 180 |
| ATTGGCAGCT | TGTCGAACTT | ACTGGCTTGC | TGGGGCTTCT | CCTTTGGGTC | TGCAGCGGCG | 240 |
| TCCGGGGCAG | TCAGAGCGAT | GCTGCTCTTT | TCATCGCTTT | CTGTCTTCTC | GCTGTCTACC | 300 |
| TCGAG      |            |            |            |            |            | 305 |

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGTGCAGCAA | TTTAGAGAGT | GTCTCAGGAG | TGTGGCTCAC | 60  |
| TGGCAGCTGC | AGCTATGTTA | GTGCTTCTTT | CTGCCTCAAG | TTCAGAAACA | AGCTGGACTA | 120 |
| TCTCAGGGTG | ATTGAATTTT | CCTGCTGTGG | AATCATAGAA | GTCTTGCACT | CTCCCAGGTT | 180 |
| TGTGTTCAAG | GTCTTCATAT | TCAGATGCTT | GAAGAATCAT | TTACATTGG  | TCTAGCATTC | 240 |
| AATCGAG    |            |            |            |            |            | 247 |

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGTCAAGTTC | ATTTCCCAGA | GTCTTAAGAC | TAAGTTCTGC | 60  |
| CTCCTCATTG | CAGGTGTGCC | GAGAGTTTTT | TTTGAACAAC | AAAAATTACT | AAGGAACCTC | 120 |
| ACTACCTTTG | GCGGTAGAAT | TAGAAAACAG | ATTCAGCAGT | CACCTACTCC | CCTTCAGTAA | 180 |
| TTCGAGACAA | TTATTTTCT  | CCTGACACAA | CATCAGGTCC | CATGAAAAAT | GACACCGTGC | 240 |
| CTGGTGTTTT | TGGGTTCTTT | AATGCTTCTT | TTAGAGCCAC | ATTTTTCTTT | TCAAACCGAG | 300 |
| TTCCCATCGC | TCGAG      |            |            |            |            | 315 |

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

```

GAATTCGGCC AAAGAGGCCT AATTTTCTT CACGTTCTTT ATCACCACCA TGGTTATGTT      60
GGCTGCCCTG GCTCACCATT TGTCTTACTG GGATGTTTGG TTTATATATA ATGTGTGTTT      120
AGCTAAGGTA AAAGGCTACA GGTCTCTTTC CACATCCCAA ACTTTCTATG ATGCTTACAT      180
TTCTTATGAC ACCAAAGATG CCTCTGTAC TGAATGGGTG ATAAATGAGC TGGCGTACCA      240
CCTTGAAGAG AGCCGAGACA AAAACGTTCT CCTTGTCTA GAGGAGAGGG ATTGGGACCC      300
GGGATTGGCC ATCATCGACA ACCTCGAG                                     328

```

## (2) INFORMATION FOR SEQ ID NO:182:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

```

GAATTCGGCC AAAGAGGCCT AGTTGTGGAA AAGAAAGACT GTGAGGGTAG GCACAAGAGC      60
ACTCAAATGT CCCAGGTAGA GAAAACAACA TGTATGATGG CCCAGAAGGA GGCAAGTCTC      120
GAG                                     123

```

## (2) INFORMATION FOR SEQ ID NO:183:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

```

GAATTCGGCC AAAGAGGCCT ACTTGGACAA GTAGAAAGTG GATGACCCAG GCTCCGTTAC      60
ATATACTTGG ATTCCAGCTG GGACCTAGAT TTGCTGAGGA CGGAAGCCAA GGACACAGGA      120
ACATGTGGCT GCTCCAGCT CTACTCCTTC TCTGCCTCTC AGGCTGTTTG TCTCTGAAGG      180
GCCCCGGCTC TGTGACTGGC ACTGCGGGGG ACTCTCTGAC AGTGTGGTGT CAGTATGAGA      240
GCATGTACAA GGGATATAAC AAGTACTGGT GCCGAGGACA GTACGACACG TCATGTGAGA      300
GCTCACTCGA G                                     311

```

## (2) INFORMATION FOR SEQ ID NO:184:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 130 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

```

GAATTCGGCC AAAGAGGCCT AGTTCAATCT GTAACAAGCC TTCTTCAATT TCCTCTCCAC      60
ATACCCTGCA TAGACTTTAA GATTCCTCTG CTCGATGCTA ATAAGAAGAC ACACACCCCT      120

```

CGTTCTCGAG

130

## (2) INFORMATION FOR SEQ ID NO:185:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 416 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGGAGGGGGA AGAGAGTCCG TTTGTCAGAA GATGAAGAAA | 60  |
| AGAGTGAAAA TTCCTCGGAG GACGGTGACA TAACGGATAA GAGTCTTTGT GGAAGTGGTG | 120 |
| AAAAGTACAT CCCACCTCAT GTGAGGCAAG CTGAGGAGAC AGTGGACTTC AAGAAAAAGG | 180 |
| AAGAAGTAGA AAGCTTGAAG AAACATGTAA AAGGTCTACT TAACAGGTTG AGTGAACCCA | 240 |
| ACATGGCTTC CATCAGTGGG CAGCTGGAGG AACTGTACAT GGCCACAGC AGAAAGGACA  | 300 |
| TGAATGACAC CCTGACCTCC GCTCTCATGG GTGCCTGCGT CACTGCCTCG GCCATGCCCA | 360 |
| GCAGACTGAT GATGGAGCAT GTTCTCTTAG TCAGCATCCT TCACCACTTA CTCGAG     | 416 |

## (2) INFORMATION FOR SEQ ID NO:186:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT ACTACATTTT TACCTAAATT TATAGAAAAT CAATTCGGAT | 60  |
| TGACATCCAG CTTGCGAGCT ACTCTGGAG GGGCTGTTT AATTCCTGGA GCTGCTCTCG   | 120 |
| GTCAAATTTT AGGTGGCTTC CTGTTTCAA AATCAGAAT GACATGTAAA AACACAATGA   | 180 |
| AGTTTGCACT GTTCACATCT GGAGTTCAC TTACGCTGAG TTTTGTATTT ATGTATGCCA  | 240 |
| AATGTGAAAA TGAGCCATTG GCTGGTGTAT CTGAATCATA TAATGGGACT GGAGAATTGG | 300 |
| GAAACTTGAT AGCCCTTGT AATGCCAATT GTAACGTACT CGAG                   | 344 |

## (2) INFORMATION FOR SEQ ID NO:187:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 488 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

|  |     |
|--|-----|
| GAATTCGGCA AGAGCCTAAA ATCTACAAGC ACCAGGAAGT CAAGATGCAA GCACCAGCCT  | 60  |
| TCAGGGACAA GAAACAGGGG GTCTCAGCCA AGAATCAAGG TGCCCATGAC CCAGACTATG  | 120 |
| AGAATATCAC CTTGGCCTTC AAAAATCAGG ACCATGCAAA GGGTGGTCAT TCACGACCCA  | 180 |
| CGAGCCAAGT CCCAGCCCAG TGCAGGCCGC CCTCAGACTC CACCCAGGTC CCCTGCTGGT  | 240 |
| TGTACAGAGC CATCCTGAGC CTGTACATCC TCCTGGCCCT GGCCTTTGTC CTCGTCATCA  | 300 |
| TCCTGTCAGC CTTTCATCATG GTGAAGAATG CTGAGATGTC CAAGGAGCTG CTGGGCTTTA | 360 |

|   |     |
|---|-----|
| AAAGGGAGCT TTGGAATGTC TCAAACTCCG TACAAGCATG CGAAGAGAGA CAGAAGAGAG | 420 |
| GCTGGGATTC CGTTCAGCAG AGCATCACCA TGGTCAGGAG CAAGATTGAT AGATTAGAGC | 480 |
| GACTCGAG  | 488 |

## (2) INFORMATION FOR SEQ ID NO:188:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGGTCAGATG CATTAAACA TATCAAAATG TTACAAAAAT  | 60  |
| GTATGGCTCC CTTGCTGAGG CCCTGTCAGA TTATGTTAGA TGAGTAAACG CATCAGTGTG | 120 |
| TAAGTTCAGA ACCAAACGTT GAATCAAGTC ATGTACTCTC GAG                   | 163 |

## (2) INFORMATION FOR SEQ ID NO:189:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

|  |     |
|--|-----|
| GAATTCGGCC AAAGAGGCCT ACCTGCTCAT ACCTGTGGCC AAAAGCATGA TGCCCCAGGC    | 60  |
| TCTGCCTCCA ATTCTACCAT CTTCTTCCAT CTTTCTCTTT TATCAGGTCT CTGCCCTCCT    | 120 |
| GTA CTTTGTGTA CTTAGATTCT CCTCTGCCAA GCCCATTGAG ACTGTGACTG GTAGGAGTGC | 180 |
| TGTGCTCAGC TTTCCACTTG AGTGTATTATC CAAGAAGTTG GATAACCCCTC TCAAGTTATG  | 240 |
| GCCTCCATTC CAGTGCGCCT CAGTCTATGG GGATGCATTC CACTCACCCT TGGGCCTAGG    | 300 |
| GCAGGTCGAG   | 310 |

## (2) INFORMATION FOR SEQ ID NO:190:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGGGCCTCAG TCTTTTACT TTTGCGGCTG TGTTCCTCTG  | 60  |
| AAGGCTTGGC ATTAGTAGAT TGAAAAGAAT AACCATCTAG GGAAATGTGA ATTCAGTTTC | 120 |
| TTTCTGACAT TCTGCTCTCT ACAAGGGGAT ATTATGTACA CATAAACCTA CTTCCAAAAT | 180 |
| AATGAAGTGA GGCCTAATTC CTTACTCTTC AGAGAGCCCA CTGTGGAAGT GTCAGTGACC | 240 |
| TTGTGTATGG GCTGCCCTTC ATGGCTCTGG GAGTCATTAT AAAGGGCAGC ATTTGGCGTG | 300 |
| GTGCGTCCTA AGCCAGTGT TCTCGGCTCT GTTCCTTAAA CATGTGTTAG TGTTAATAGA  | 360 |
| TGTTCTTGGA AAAAAAAAAA AAAAAACAGC ATTCTGAGGT CAAACATGCT CAGAAAGCTT | 420 |
| GGAATCTGCA CTACGCTTCT CGTACACATT TCATATTAAA GATTTTGGA AGTCCTGCAA  | 480 |

TACAGAGCCC TGTCTAATAT TGCCACAGCC CTCGAG

516

## (2) INFORMATION FOR SEQ ID NO:191:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACTTGCTAGA TAGACAGATT AAGAATGTTG AAGACATGGT | 60  |
| CCAGTTTATT AATAACATTT TGGATGGCAC AGTAGAAGCC CAAGGAGGTG ATAGCATTTT | 120 |
| GCAGAGATTG AAAAGAATAG TATTGATGC CAAATCTACT ATTGTGCTA TATTCAAGAG   | 180 |
| CTCACCCTG ATGGGCTGCT TTCTCTTTGG CCTGCCACTG GGTGTCATCA GTATCATGTG  | 240 |
| CTATGGAATC TACACAGCCG ACACAGATGG AGGTTATATA GAAGAACGAT ATGAAGTGTG | 300 |
| TAAAAGTGAA AATCTCGAG  | 319 |

## (2) INFORMATION FOR SEQ ID NO:192:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AAGCAGAAGG ACATATTAGA GAAGGATTGT ATAGTTTCT  | 60  |
| GGTAAAAGAT GACAGTGAAT TGTATGGGCG ATGGATTAGC CGTGAAGGT GTTGAGTATA  | 120 |
| AGTGGTCTCC AGCCAAACTC TATGGTTACT GGAATAAGAG AGTAGGAACC TTCTCAGGCT | 180 |
| TTATCTTTAT CTATTCTTGT CAACAGTATG TACATGTGTC CCCCAGCCCC AAATAACTGT | 240 |
| ACAGTTTAAT GATGTTCACT CTATACAGT CCCAGAATCC ATTGGAAATT GCTGTAACAG  | 300 |
| CATATCCTCA ATGCCATCA ATTCTCCACG TCCAATTCT CCATGGCCTC CTCTGCCTCT   | 360 |
| GCTGATCTGT GAACTTCTCG AG  | 382 |

## (2) INFORMATION FOR SEQ ID NO:193:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 474 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AATATTTTAA AAGCGAAAGC TAACTTCTAA TTTTGAAAAT  | 60  |
| TTTTATTGGG AGCAGGATAT TATAATAATA ATCTTTAGTT GTTAAACCAT TAAACATCAA  | 120 |
| GGTTTTTTAC ATTGTTTCTA TGCCTCCTCC CTCAAAAAAA AAAAACCTCC TACAATAAAA  | 180 |
| CTGAAAAATT GCACAAAGAC ATATTAGTGG AAGACCACTG CTTGTTTTAC ACAAAATGAAG | 240 |
| AGTATAAAGC AGAGAAGTGC TCCTTGGGGC AAAAGGCAAT TGGCAAAAAG CTAAGGAACA  | 300 |
| TTTTCATAAT GAATTAGAAA TACAGATCAT CAGGAATATC CAGGAAGCGA TAGTGAATAC  | 360 |

CAGGCAGGCT TAAGAGACAG GAAACATTTA GCATGTTGGT AAACCACTTT AGCACATCAG 420  
 CAAAAGCATA TAAACAGCTT TAGGATTGGA AATTATTGCC AGGGGGGACT CGAG 474

## (2) INFORMATION FOR SEQ ID NO:194:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 499 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCGGCC TTCATGGCCT ACGTNNCTAT GTCTTCAAGC ACAGAGGTGT CCAGGTGTAT 60  
 TGCACATCTT CATCGCACTG AGCTGCATGG ACAGCTGATT TCTGTGGAAA AAGTATAAGG 120  
 TGATCCCTCT CAGAAAGAAA TGAAGAAAGA AAATGATGAA AAGAGTAGTT CAAGAAGTTC 180  
 TGGAGATAAA AAAAATACGA GTGATAGAAG TAGCAAGACA CAAGCCTCTG TCAAAAAGAA 240  
 AGAGAAAAGA TCGTCTGAGA AATCTGAAAA AAAAGAAAGC AAGGATACTA AGAAAAATAGA 300  
 AGGTAAAGAT GAGAAGAATG ATAATGGAGC AAGTGGCCAA ACATCAGAAT CGATTAAAAA 360  
 AAGTGAAGAA AAGAAGCGAA TAAGTTCCAA GAGTCCAGGA CATATGGTAA TACTAGACCA 420  
 AACTAAAGGA GATCATTGTA GACCATCAAG AAGAGGAAGA TATGAGAAAA TTCATGGAAG 480  
 AAGTAAGCAA ATGCTCGAG 499

## (2) INFORMATION FOR SEQ ID NO:195:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 337 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCGGCC TTCATGGCCT AAGCAAAAGA GCATTAAAGAA GTGTCTGTTT TTGTTATTGC 60  
 CATTTCATAA ATATTTTAGT AGGTGTTCAA TTTCATTGGA TATTCTTTT TTTTAATTGT 120  
 CTTTGTACCT ATGATTGAAA ACAGTAGTTG GTCTATGACT TTTGAGGAGA GGGAGAACCG 180  
 AAGATTACAG GAGGCCAGCA TGAGTTTGA ACAAGAGAAT GATGACCTTG CCCATGAAC 240  
 AGTAACAAGC AAAATTGCTC TACGGAATGA CTTGGATCAG GCAGAAGACA AGGCAGATGT 300  
 GTTGAATAAA GAGCTCCTTT TGACCAAAAC CCTCGAG 337

## (2) INFORMATION FOR SEQ ID NO:196:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 386 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

GAATTCGGCT TCATGGCCTA AAGGAACTG ACAAATTATC CCCAGCTGCC AGAAGAAGAA 60  
 ATCCTCACTG GACGGCTTCC TGTTCCTGT GGTTCATTAT CTGATTGGCT GCAGGGATGA 120  
 AAGTTTTTAA GTTCATAGGA CTGATGATCC TCCTCACCTC TGC GTTTTCA GCCGGTTTCA 180

|   |     |
|---|-----|
| GACAAAGTCC AATGACTGTG CTGTGCTCCA TAGACTGGTT CATGGTCACA GTGCACCCCT | 240 |
| TCATGCTAAA CAACGATGTG TGTGTACACT TTCATGAACT ACACCTGGGC CTGGGTTGCC | 300 |
| CCCCAAACCA TGTTCAGCCA CACGCCTACC AGTTCACCTA CCGTGTACT GAATGTGGCA  | 360 |
| TCAGGGCCAA AGCTGTCATC CTCGAG                                      | 386 |

## (2) INFORMATION FOR SEQ ID NO:197:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 429 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGTTTTGTC TTTTCTCTT TTTGGTATT ATTTGTTTG     | 60  |
| CCACTTATTC CTAAATTC AATTGCTATT AACCGTACAC ATCTTCCAT GTTCTTATAA    | 120 |
| TAATCTACAA ACATCTCTCC CTTCTCTAG CTCTCTCTGT CACACACACA CACATGCACA  | 180 |
| CACGCACACA CACACACACA CACACGCTGT GCACTCTCCT GAAGCATGTG TGTACATACA | 240 |
| TACATATGTG AGGGGTTTTA TGACTGTTTT ACCAAATTGT GTTCTTAATA TATACAATGT | 300 |
| TGGCTTCTTT TTAGCCATTG AGAAGTTATT TCAGTCATGG AATGATCTCT AGCCATATAA | 360 |
| CTGAAAACAG GTAAGTTTCT TTCTGGGGA AGAAGGGCGA ATGGTGATAG AGAAAAATGA  | 420 |
| GAGCTCGAG   | 429 |

## (2) INFORMATION FOR SEQ ID NO:198:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACCAAGCTAT GCAGGAACAG TTGTCTAAGA ACAAAGAACT | 60  |
| GACACAGAAA CTCCAGGTAG CCTCTGAGAG TGAGGAAGAG GAGGGAGGCA CAGAAGATGT | 120 |
| GGAAGAACTC CTTGTCCCTG ATGTAGTGAA TGAAGTGCAG ATGAATGCAG ATGGGCCGAA | 180 |
| TCCCTGGATG CTCAGGAGCT GCACCAAGTA CACCAAAGAG GCTGCAACCC AGGAGGACCC | 240 |
| TGAGCAACTG CCAGAGCTTG AGGCCCATGG AGTTTCTGAA AGTGAGGGAG AAGAAAGACC | 300 |
| AGTGGCAGAA GAAGAAATTT TGTGAGAGA ATTTGAAGAA AGGCTCGAG              | 349 |

## (2) INFORMATION FOR SEQ ID NO:199:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 312 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGGGAAAGCT CCAACTTGCT TTACCTTTCT AAGATATCCC | 60  |
| ATTTTCTCTA TACCATTGTG TGAATAATAT ATCTCTTGCC CACTGGTTTG TAACAGTGCC | 120 |

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| TTAATTAGTT | TTTGTGTTTG | AAGTTCCAGA | ATCTCTTCCT | GGCCTATGTA | TTGTGTTCCG | 180 |
| TTGATGGATC | TTTCCATCCC | ATGGTACCCT | TTACTATTAT | TGTCTTCATT | TTTATTACTA | 240 |
| TTGTTATGCC | CTTTTCTCTC | TCCGTGCACA | TCTTCATGTT | TGAACTCTAA | AAACACACCG | 300 |
| CCAACGCTCG | AG         |            |            |            |            | 312 |

## (2) INFORMATION FOR SEQ ID NO:200:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 385 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AATATATCCA | AGTAATAGCA | TGTACAGTTT | GGTAAGCAAT | 60  |
| ATAATAGAGA | GATATTCACA | GTGAAATAGG | AAAGAGCAGT | ATAGGTGCAA | AGACAAAAG  | 120 |
| CATGACACAG | CTAGATACAG | GGCAGCTGTT | ATTGGTTTGG | TATGGAGAAA | ACCTGGAGAA | 180 |
| ATGGTGAGAG | AAGGGGCAGA | AGATGAGAGG | GGCCAGATCA | TGGAGTACCT | GTTTGTGGCG | 240 |
| CTCAGGAGTT | TAGATGTTAT | CATGCAGATA | ACTAGGAGCC | ATTTGAGGAA | CTTAAATACA | 300 |
| GGAGTGATAC | CAGATTTATA | TGTTTTTAAA | ATGATTACTT | GGTGGTAATT | AAAGAAAAGA | 360 |
| TTGGATGATT | TAGGCAGATC | TCGAG      |            |            |            | 385 |

## (2) INFORMATION FOR SEQ ID NO:201:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 204 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| AATTCGGCCT | TCATGGCCTA | CGTTTTTTTA | AATTTTTTTA | ACTACATATT | TGATACGATC | 60  |
| TTTCTCTTCT | TGCCTTCTTT | TTGATTACTT | ACTTTCTACC | ATTCTATGTT | TTTCGTCACT | 120 |
| AGTTTGAAAA | TTGTATACTT | TGTTTTTATT | CTTTCAGTGG | TTACCCTAGA | AATTACAACA | 180 |
| AACAAAAATT | GCAACAACCT | CGAG       |            |            |            | 204 |

## (2) INFORMATION FOR SEQ ID NO:202:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 450 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAAATCATCA | TGCATATTTA | TTTCTCCAAA | GCACCTTTGA | 60  |
| CAAGCATGAT | TTGGATAGAG | ACTGTGCTTT | GTCACCTGAT | GAGCTTAAAG | ATTTATTTAA | 120 |
| AGTTTCCCT  | TACATACCTT | GGGGGCCAGA | TGTGAATAAC | ACAGTTTGTA | CCAATGAAAG | 180 |
| AGGCTGGATA | ACCTACCAGG | GATTCCCTTC | CCAGTGGACG | CTCACGACTT | ATTTAGATGT | 240 |
| ACAGCGGTGC | CTGGAATATT | TGGGCTATCT | AGGCTATTCA | ATATTGACTG | AGCAAGAGTC | 300 |

TCAAGCTTCA GCTGTTACAG TGACAAGAGA TAAAAAGATA GACCTGCAGA AAAAACAAAC 360  
 TCAAAGAAAT GTGTTTCAGAT GTAATGTAAT TGGAGTGAAA AACTGTGGGA AAAGTGGAGT 420  
 TCTTCAGGCT CTTCTTGGAG AAGACTCGAG 450

## (2) INFORMATION FOR SEQ ID NO:203:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

GAATTCGGCC TTCATGGCCT AACTGGTTTC TGGCTCGTGG ANTCGTGTTT AAGATCATAT 60  
 AAGCCGTTGC CATTCCCAAG NAGCGCTGGG ATATGCTCCT TCTCAGATGC TGCTATTTC 120  
 GTGAAGGTAT TTAATGCTTG TTCAACATTA GATTCTGTG TGGTAGCCAT TAAGCAATAG 180  
 TTTTCCATTA TGCGAANCTG TACGTGACCC TGAACAGTCT GAGGTTTTCAG TTCCTTAANA 240  
 AGTTTCTCTG CTGTTCTTAC TGCCAGTTGC ACAGATTCTT GCTTCTCAGT TGAATAACCC 300  
 AGGTCTCCAT CCAGGTTTTC AAATACTTCA CCTCCAACAG TTTCATTATC TGGATTCAAA 360  
 CAGATCTCTA TCATATTATA AAGGGCATT TGGCCCCAGT CACGATCTTT CCGAGCTTTA 420  
 TTAAATGTC GAAGGGCATC ATTTGGTTCT CCAGTGTACC AAAGATACAG TCCTTTACAA 480  
 TACTGAAATC CTGTTTCCAA TTTTGCTCTG GAGNNACGTT TCTCAGCCAT TGAGAAAAAT 540  
 CTTGGGACAT CCCTCGAG 558

## (2) INFORMATION FOR SEQ ID NO:204:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCGGCC TTCATGGCCT ACAAGTAGGG ACTGACTTCT CTAGGTTCCCT ACAAAGCTCT 60  
 TCAACCACAC TCATTTCAG CTCTGTGAGA ACAGCATCTG AATTAGGAGG ACTTTGGGAT 120  
 TCTGGGATAC AGGAAGTATC CAGAGCTTTG GATATAAAAA ACCCTGGGAC AGATATTTTG 180  
 CAGCCTGAAG AGACCTATAT AGACCCTACT ATGATACAAT CTTTAACTTT TCCTTTGGCC 240  
 CTTCATAATC AAAGCTCCGA TAAGACAGCT AACATTGTGG AAAACCCATG TCCTGAGATT 300  
 CTAGGAGTGG ATGTAATATC TAAAGAGACA ACTAGGAGGA AGCTCGAG 348

## (2) INFORMATION FOR SEQ ID NO:205:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

GAATTCGGCC TTCATGGCCT AAGAAAAAAA AGAAAGAAAA AAAATGATAC TTTCAGGTT 60

```

CGCTTGGGTC CAGATCTGTA TTCCCAGGGC TCATAGAGAT ATTGGCAAAC TGACAGATTT 120
CATGGCTCAA GAAACCTAAA GACACCTACT TGAATTCCTT TGGTTGGCAG TCAAATGTTA 180
ACTAGTGTGT TTCAAGCTT CTATCTTAG GCATGTACT TCCTTTTGA AGTCAAAACC 240
AACCATCTTT TAAGTAAGAG GGCTAACCA ATATGTGCCA CACTAACTCG AG 292

```

## (2) INFORMATION FOR SEQ ID NO:206:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 220 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

```

GAATTCGGCC TTCATGGCCT AAAATATTAA AATCTTTGAA GAAGAAGAAG TTGAATTTAT 60
CAGTGTGCCT GTCCCAGAGT TTGCAGATAG TGATCCTGCC AACATTGTTC ATGACTTTAA 120
CAAGAAACTT ACAGCCTATT TAGATCTTAA CCTGGATAAG TGCTATGTGA TCCCTCTGAA 180
CACTTCCATT GTTATGCCAC CCATCTCGAG GCAGGTCTAG 220

```

## (2) INFORMATION FOR SEQ ID NO:207:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 333 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

```

GAAAAAATGG CCAAGGCTAC TGGGAACTA AAGCCAACTT CTAAGATCA GGTATTGGCC 60
ATGCTAGAGA AAGCCAAAGT TAACATGCCA GCCAAGCCTG CTCCACCCAC TAAAGCAACT 120
TCTAAACCAA TGGGAGGGTC CGCTCCAGCC AAATTCAGC CTGCATCAGC ACCTGCTGAA 180
GATTGTATTT CCAGCAGTAC AGAACCCAAA CCTGATCCAA AAAAGGCCAA AGCTCCAGGA 240
TTATCTCTA AAGCAAAGAG TGCACAAGG AAGAAGATGC CAAGCAAAAC CAGCTTAAAG 300
GAGGATGAAG ACAAATCCGG GCCTATACTC GAG 333

```

## (2) INFORMATION FOR SEQ ID NO:208:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

```

GGAGACAAGT TCTCCTCAGT GAACTGGCAG TACCAGTGTG GGCTTACCTG TGAGCACAAG 60
GCCGACCTTC TCCCTATCAG TGCAATCCGTC CAGTTTATTA AAATTCCTGC ACAGTTACCC 120
CAGCCCTGGA CAAGATTCCA GATCAATTAT ACAGAGTATG ACTGCAACAG AAATGAGGTG 180
TGTTGGCCGC AGCTTCTATA TCCATGGACT CAGTATTATC AAGGGGAGCT GCATTCTCAG 240
TGTTTGCTA AGGGCTTACT GTTGCTGTTG TTCCTCACAT TGGCCTTGTT CCTCAGCAAC 300
CCCCGACCA CTCGAG 316

```

## (2) INFORMATION FOR SEQ ID NO:209:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 517 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

```

GAATTCGGCC AAAGAGGCCT ATGTCCCTGT CCATCTTAGA GGCTGACCAA GCCCAGCCAT      60
GGGTGGTCCA AATTGCTTAG GTGGTCCCAA TTGCTTGGCT GGCCCAAGAG ATGTCTGGTT      120
CTTAACAATA CAAGAGCCTA TAGAAATTGC TAAAGGGATT TCAGCCACAA CTGAAGCTCA      180
CCAAGAATGA GTTTTCTGGA ACTGGTTAAA GTGTCACAGT AGGGAGTAAG GAAATAAGAA      240
TCCCCACCAA ACATAAGAGA ACAGAATGAT AATAGTCCCT ACTAGTCCAT GACAAGGCTG      300
CCAATTAGGC ATTAAAGCT ATCAAAGATG ATGCTGTGAG GGACCTGGCA ACTTTGTAA      360
TAGTCTGACT TTAAATGTTT TATTAATGGC CAAGCAGCAA ATATTTTAGG ATTTGTAGGC      420
TATATGGTCT CTGTCCCAAT TACTCCATTC TGCTACTGTA GCATAAAAGC AGCGATACAT      480
CCTAAACCCG TCGATTGAAT TCTAGACCTG CCTCGAG                                517

```

## (2) INFORMATION FOR SEQ ID NO:210:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 829 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```

GAATTCGGCC AAAGAGGCCT AAGAACATGA AACATCTGTG GTTCTTCCTT CTCCTGGTGG      60
CAGCTCCCCG ATGGGTCTCG TCCCAGGTGC AGCTGCAGGA GTCGGGCCCA GGACTGGTGA      120
AGCCTTCGGA GACCCTGTCC CTCACCTGCA CTGTCTCTGG TGATTCCATC AGTCATTACT      180
ACTGGACCTG GATCCGGCAG CCCCAGGGC AGGGACTGGA GTGGATTGGA TATTTCTATT      240
CACCCGGGAA CTCCAACTAC AATCCCTCCC TCAAGAGTCG AGTCACCATG TCAGTCGACA      300
CGTCCACGAA CCAAGTTCTCC CTAAACTCA NTTCTGTGAC CACTGCGGAC ACGGCCGTCT      360
ATTACTGTGC GAGAGACCTA TATTGCCGTG GGGGAACCTG CTACCCCGCG AGACTTGACC      420
GCTGGGGCCA GGGAAACCCG GTCATCGTCT CGTCAGCCTC CACCAAGGGC CCATCGGTCT      480
TCCCCCTGGC ACCCTCCTCC AAGAGCACCT CTGGGGCACA GCGGCCCTGG GCTGCCTGGT      540
CAAGGACTAC TTCCCCGAAC CGGTGACGGT GTCGTGGAAT TCAGGCGCCC TGACCAGCGG      600
CGTGACACCC TTCCCGGCTG TCCTACAGTC CTCAGGACTC TACTCCCTCA GCAGCGTGGT      660
GACCGTGCCC TCCAGCAGCT TGGGCACCCA GACCTACATC TGCAACGTGA ATCACAAGCC      720
CAGCAACACC AAGGTGGACA AGAAAGTTGA GCCCAAATCT TGTGACAAAA CTCACACATG      780
CCCACCGTGC CCAGCACCTG AACTCCTGGG GGGACCGTCA GTCTTCCTC                                829

```

## (2) INFORMATION FOR SEQ ID NO:211:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

GAATTCGGCC AAAGAGGCCT AGTTAATCTG ATAAATTCAC CATCAATTG GTAAGCTTTA 60  
 ATATAACTAC CCTGTTTTT GAATACAGAT AATGCAAAAG AAAACCATT TATACTGGC 120  
 TATATACCTT CCACCACTCG AG 142

## (2) INFORMATION FOR SEQ ID NO:212:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

GAAATTCGGC CAAAGAGGCC TAGTGAATC ATTCTGCCAC ACCATTTCCT ACTCAAATAG 60  
 GTACAAACAT ACCACAGACA CTCCCATATA CACATGCTCC TCTATCCGCC AACTCTGGAA 120  
 CCAAACTAA ATTGGTCTTC AAGAGAGATG ATGGCTTTAA GAACAAAAAT AGCCTTATCC 180  
 TCTATTTTAC TTGCTGTACT GTGTACTGT TTATTTAAGA AACAACTGG TGGTTGATGT 240  
 CCAGGAAAAA TTATCTTTTC AAAATGAGGG AAGAGGAGGT TCACCATGTG GATATGGTGT 300  
 GCCTTTCAAC ATCCTTAAGG ATTGTTGATA TCATTATTGT TAATCAATTG TTGTCAGCAC 360  
 AGTGGCTGCC CAAGCTGTGC AAATGAAACA GCCAATCAGC AGGAGAAAGT GATGAAATTA 420  
 AATGACCTCT TTCCTTAACC ACTCATCCGT AAGCCTTGTT ATTTTTCATA CAAACCTCGA 480  
 GCCGGGGGAG GAGGGGCGGC GCGAATGCT GGGAGAGTCA GGTCTAGAAT TCAATCGTAG 540  
 GCCTCTTTGG CCGAA 555

## (2) INFORMATION FOR SEQ ID NO:213:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 97 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

GAATTCGGCC AAAGAGGCCT ACGAGAAGGG CGGTGTGTAC AAAGGCGAGG GACTTAATCA 60  
 ACGCAAGCTT ATGACCCGCA CTACTGGGA ATTCTCTC 97

## (2) INFORMATION FOR SEQ ID NO:214:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

GAATTCGGCC AAAGAGGCCT AAGAAGAAAT TGGTAGATTG CGAGAAGAGA TAGAAGAATT 60  
 AAAACGTAAT CAGGAACCTT TACAAAGCCA GCTGACTGAA AAGGACTCTA TGATTGAAAA 120  
 TATGAAATCT TCCCAAACAT CTGGCACAAA TGAACAGTCT TCAGCAATAG TTTCAGCTAG 180  
 AGATTCTGAA CAAGTTGCAG AATTAAACA GGAAGTGGCA ACTTTAAAGT CTCAGTTAAA 240

|  |     |
|--|-----|
| CTCACAATCT GTGGAGATCA CCAAACCTACA GACAGAAAAG CAGGAACTGT TACAGAAAAC | 300 |
| AGAAGCGTTT GCAAAATCAG TTGAGGTACA AGGAGAGACC GAGACTATAA TAGCCACCAA  | 360 |
| AACTACTGAT GTAGAAGGAA GACTGTCAGC ATTATTACAA GAGACCAAAG AGTTAAAGAA  | 420 |
| TGAAATTAAA GCTCTGTCTG AGGAAAGAAC TGCCATTAAA GAGCAGCTGG ATTCATCTAA  | 480 |
| TAGTACC  | 487 |

## (2) INFORMATION FOR SEQ ID NO:215:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT ACTGGGCCTT TCAGCACCTG CTCCAGCTTC ACCTTGGTGA | 60  |
| ACATCAGGTT GAAGTTCTCA GGGTGCTCGG TGATGGCCAT GTTGACAACA TCCAGGGCAT | 120 |
| GCTGGTGGTG CTTCTGGGCA GAGAAGAGCA GTGCCAGCAG GTGGAGGGCG TGGGCATCAT | 180 |
| CCTTGCGTAC CTTCAGGGCC TCCTGCAGCT GCTCCATGGC ACTGGAGATC TGTCGGACGA | 240 |
| GGGCCAGCTG CAGCGAGACA TAGAGGATGA CCTGGGGGTC ACTGGGCGCC AGCTGCTGAG | 300 |
| CCCTCTCCAG CGTCTGCAGT GCCTTCCGT GCAATTCATC TTGCTTGGAC TTCAGGGTGG  | 360 |
| CGTCGGTGGC CTGCAGGCTA TAGGTGAGAC CCAGAGCCAG GTAGCCCTTG GGGAGGAACT | 420 |
| CCCCGGCTTC CTCTCCGAGG CTGATCACCA TCATGGCAA GTGCTCTGCT TCCTCTAGCC  | 480 |
| AGCGAAGGGA CCCGATGCAG ACCTTCGCGG CCATCAGGGG CACGGTGGGG TCCGAGGGCC | 540 |
| GCAACTTCAC AACTCCCCG AGCAGGGACA CAGCGTAGGC TGAC                   | 584 |

## (2) INFORMATION FOR SEQ ID NO:216:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGACCTGCCC TAAAGATAGA GTCTTGATGC ACCGTCTACC | 60  |
| TTGTCCCCAA CCAAGAGTGA GTAGTGACA GAAGTCTCCT GGCACCTTG GAATCCTGCA   | 120 |
| TTTTTAATGG ACGAGCAGGG CAGGAAAGAA AAAAAAACC CAAACCCCAT CACTCTGCCA  | 180 |
| GCCCCGTGTA CCAAGCAGC CCAAATCAGT TACCTTGACA ACTCTCATGC ACAGACTGCA  | 240 |
| CCAGCCTGTG TTGCAACAT CACTGCCCG CTTCTAACAG GAAGAGATAC TCTTTTGGGG   | 300 |
| GTCTTGCAAG GCCCAGGACC AGAGCCCTT CTACCCAGGG CCCTTCCAAA GGCAAAGCAC  | 360 |
| AGAGTCACAT TTGGGCGTGG CATGAGAGGG AAATAAGAG ATTGGCTGT AGTGGGAGGG   | 420 |
| AGGTTTCAGT GCTTTTCTG GGGACATTGG TGCCTATCTC TATTCTGAGA GTTGTCTTCC  | 480 |
| TCATAGGACA CCATAATCG CATCCAGGAC CTGCTGGCTG AGGGTACTCG AG          | 532 |

## (2) INFORMATION FOR SEQ ID NO:217:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGTGTGTCCG | GGTCTTATAC | AAAAACAACA | CAGTGAATGA | 60  |
| AGGAATAAAT | ATTTATTGAA | TGGAAAATCA | GCAAAGGAAA | AAATTGTATA | ATTGTCAATG | 120 |
| ACAATGGGAA | GCACATAGTG | AGGCTATGAG | TGATTTGGAA | ATCATGAGCG | TGCAGTGTTC | 180 |
| TGTTACAGCA | TTTCGGTTGT | GTTTTCAGAA | AGTAACTACA | ACATAGCATC | ATGTAGCAGA | 240 |
| ATTGCTGGTT | GTAAGCAAAA | AGGCTCGAG  |            |            |            | 269 |

## (2) INFORMATION FOR SEQ ID NO:218:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AATTCCTTTT | CTTTTAAATT | TGAAGAAAAA  | TCATCAGTCT | 60  |
| TGGAATACAG | AAGAGAAACT | AGAAATATAC | GTATTTTGTT | TCACATTGTA  | ACAGTCATTC | 120 |
| TTGAGGAATA | CTCCATACCT | GAGTAGACAG | CCATGTGGCC | ATCGCAGCTA  | CTAATTTTCA | 180 |
| TGATGCTCTT | AGCTCCAATA | ATTCATGCTT | TCAGCCGTGC | CCCAATTCCA  | ATGGCTGTGG | 240 |
| TCCGCAGAGA | GCTATCCTGT | GAGAGCTATC | CTATAGAGCT | TCGCTCTCCA  | GGAACAGACG | 300 |
| TCATCATGAT | AGAAAGTGCC | AACTATGGCA | GGACTGATGA | CAAAATTTGT  | GACTCTGACC | 360 |
| CTGCTCAGAT | GGAGAATATC | CGATGTTATC | TGCCAGATGC | CTATAAGATT  | ATGTCTCAAA | 420 |
| GATGCAATAA | CAGAACCCAG | TGTGCAGTGG | TGGCAGGTCC | TGATGTTTTT  | CCAGACCCGT | 480 |
| GTCCAGGAAC | CTATAAATAC | CTTGAAGTGC | AGTATGAATG | TGTCCTTAC   | ATTTTCTTT  | 540 |
| GTCTTGGAAT | ACTAAAAGGA | GTATACCAGA | GTGAACATTT | GTTTGAGTCC  | GACCACCAAT | 600 |
| CTGGGGCGTG | GTGCAAAGAC | CCTCTGCAGG | CATCTGACAA | GATTATTATAT | ATGCCCTGGA | 660 |
| CTCCCTACAG | AATCG      |            |            |             |            | 675 |

## (2) INFORMATION FOR SEQ ID NO:219:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACTCCCTGTT | TGAACAAGT  | TTTTTTGAGA | ATTCTTAGTT | 60  |
| TTAGTTTTTG | TTTAGCTTAC | ACACTGAAAA | TTTTGAGAAG | CATCTAAAAA | AATCCACAAT | 120 |
| TAGTGCAAAA | AGAGGGGACA | ATACTTTAAG | TCATTCCTTC | TATAAAAAGA | ATTAAGGTTA | 180 |
| CTAAATGCCA | ATTTTAAAGC | AAATATATAG | TTTCCTATTT | GCCTTCTGAA | AGACAGCAGA | 240 |
| TATAAAAATA | GTTCAATATT | AGGTTTAAAC | AGGTTTGAAC | AACACATGTA | CTATCAGCTT | 300 |
| TATTTTACCT | GCAAAAATAT | TTTAGCTACA | CTTGGAAAAA | AATAAACTTG | AGAATATAAC | 360 |
| TTACATTTC  | TAAGGCCAGA | TGCAAGAATA | CTTATTAGG  | CCTCTTTGGC | CGAA       | 414 |

## (2) INFORMATION FOR SEQ ID NO:220:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

|   |     |
|---|-----|
| GACCGTCGAT TGAATTCTAG ACCTGCCTCG AGATTGGAGA CAGAAGGTCC CGGGAGCAGA | 60  |
| AAGCCAAACA GGAGCGGGAG AAAGAACTGG CAAAAGTCAC TATCAAGAAG GAAACTCGAG | 120 |

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AAGCAGCAGC TGCTTATATG CATGTGAACA GCTGGGGAAT | 60  |
| TAATTTGGTA TGCATTCTCA GGAGCCACTC ATCTGCTGGC AGAGGTAGCA GAAGAATGCC | 120 |
| CTTAGTGTA GTCCTCTACA ACCATACACC AAATGTGCTC CCTGCATTTC AAATTCATT   | 180 |
| GTAAGAAATC TCTGATAATC TCACTTATAC CATGAGCCAT TCCTCAGTAT CTGTCCTCTT | 240 |
| CCTGTTAGTG TTCTACAAT CTTTCTCCT TAATTTTCT CCGCTTTACA AAATGTACA     | 300 |
| CAGACAAGTG CATAATACTT AAACAAGCTC GAG                              | 333 |

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AAGAAAAGCA CCCTTATTAA GAATTGCAGC AAGTAAGCCA | 60  |
| ACAAGGTCTT TTCAGGATGA TTTTCTTATA TCAAGTGGTA CATTTTCAAT TATTACTTC  | 120 |
| AGTTTCTGGT GAATGTGTGA CTCAGTTGTT GAAGGACACC TGCTTTGAAG GAGGGGACAT | 180 |
| TACTACGGTC TTCACACCAA GCGCCAAGTA CTGCCAGGTA GTCTGCACTT ACCACCCAAG | 240 |
| ATGTTTACTC TTCACTTTCA CGGCGGAATC ACCATCTGAG GATCCACCC CATGGTTTAC  | 300 |
| TTGTGTCCTG AAAGACAGTG TTACAGAAAC ACTGCCAAGA GTGAATAGGA CAGCAGCGAT | 360 |
| TTCTGGGTAT TCTTTCAAGC AATGCTCACA CCAAATAAGC GCTTGCAACA AAGACATTTA | 420 |
| TGTGGACCTA GACATGAAGG GCATAAACTA TAACAGCTCA GTTGCCAAGA GTGCTCAAGA | 480 |
| ATGCCAAGAA AGATGCACGG ATGACGTCCA CTGCCACTTT TTCACGTACG CCACAAGGCA | 540 |
| GTTTCCCAGC CTGGAGCATC GAAATCTTTG TCTCCTTAAA ACATCTGAGA GTGGATTGCC | 600 |
| CAGTACACGC ATTAAAAAGA GCAAAGCTCT TTCTGGTTTC AGTCTACAAA GCTGCAGGCA | 660 |
| CAGCATCCCA GTGTTCTGCC ATTCTTCATT TTACCATGAC ACTGATTCTT TGGGAGAAGA | 720 |
| ACTGGATATT GTTGCTGCAA AAAGTCACGA GGCCTGCCAG AAAGTGTGCA CCAATGCCGT | 780 |
| CCGCTGCCAG TTTTTCCT ATACCCCAAC GCTCGAG                            | 817 |

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

```
GAATTCGGCC AAAGAGGCCT AGGAGATACA TCATCATATC ACGGAAAGAG ATGCAGATAG      60
ATCTTTGACC ATACTTGATG AACAGTTATA CTCATTTGCG TTTCCACCG TGCACATTAC      120
GAAGAAAAGA AATGGAGGTG GGAGTTTAAA TAACTATTCC TCCTCCATTC CATTGACTCC      180
CAGCACCAGC CAGGAGGACC TTATTTCAG TGTTCCTCCC ACTGCCAACA CACCCACGCC      240
CGTTTGCAAG CAGTCCATGG GCTGGTCCAA CCTGTTTACA TCTGAGAAAG GGAGTGAGCC      300
AGACAAAGGG AGGAAAGCCC TGGAGAGTCA CGCTGACACC ATCGGGAGCG GCAGAGCCAT      360
CCCCATTAAA CAGGGCATGC TCTTAAAGCG AAGTGGGAAA TGGCTGAAGA CGTGGAAAAA      420
GAAATATGTC ACCCTGTGTT CCAATGGCGT GCTCACCTAT TATTCAAGCT TAGGTGATTA      480
TATGAAGAAT ATTCATAAAA AAGAGATTGA CCTTCGGACA TCTACCATCA AAGTCCCAGG      540
AAAGTGGCCA TCCCTAGCCA CATCGGCCTG CGCACCCATC TCTCGAG      587
```

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 534 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

```
GAATTCGGCC AAAGAGCCTA AGTAGTTGCT GCCTTTCTTC AGATCAGGTT ACCACAATGC      60
CTCCCCGCTG CTGACGCTTC ATCCCCCACA CCTCCAGCCC CAGTTACCTG GAGCTTCTCA      120
GAACCCACTT TGCCGGTGCT AAAACACAAG AGGGGGTGAA AGTGGCTGCC AGTAATGGCC      180
AGAAACCAAC CACCAGAGGC CAGGCTGAAA GACAAGCTCC GGGTGTCCAG GGGCTGACGG      240
GCCAACCATG TGGCAGGTCC CAGGCCCCAC CCACTGCGCC ATCCGTCTCT GAGCTCCACA      300
GTGGTCCAC TAATGGGAAC CTCCTCTAGG GAGAGTGATA CTGCACCTTC ACCCGTAGGA      360
CTCATATTTA TAACAATGTG TAATGGCTGT AGCAAAAAGC CCTTGTTTCT AGATGTAAAT      420
GGTCAAAGAA ACAAGCGCTC TATTGTTTGT AATAAAATAG TTCAAATGAG TCCTGTATCA      480
TTGTATCTCC TATTCTGGAT TAGTGCCCTT TGGACAGTAG ACTGTAACCT CGAG      534
```

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 118 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

```
GCTCCACTCT CTCCCTATCC ATTTGTAAGA ACAGGCTCCC CTCGCCGAAT ACAGTTGTCT      60
CAAAATCATC CTGTCTACAT TTCCCCACAT AAAAATGAAA CAATGCTTTC TCCTCGAG      118
```

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

```
GAATTCGGCC AAAGAGGCCT AAATTTTAGT AGAGATGGAA TTTCACCATA TTGGCCAGGC      60
CGGTCTCAAA CTCTTGACCT CAAGTGATCT GCCCGCCTCG GCCTCCCAAA ATGTTGAGAT      120
TACAGGCGTG AGCCACCATG CCTCTCTTAC ATTCTTTTCT TCTGTTCACT ACAGCCGTGG      180
AGAGCTCCGG GTTGTCTGTC ACATGTGCAC TGCCCTCTCT TTTATGGACC TTTTAGGCTG      240
GCTGCACCCT CCGTCTGTGT CACCCTCCTG CTCCTCCTCC ACCTGGCTAG TTCCTGTTGG      300
CCACTTTTGG AAATTCATGC CAGTCCAGTC CACCCTGAGT ACATCTCTT TCTGTGTCAC      360
TGAGCTCACT ATGCTGGGTT TTATCTATGT CTCCTCGCA ACTAGATCAT TCAGTCTTG      420
AAGTTAGGCA TCATGCGTTC TTCATTTCTG TACCTCCCAA CTCATGCTT AGCACCAGC      480
AGGGGCTCAA GACTGTGTGT GGAATGAAGG ATTCTGTGA AAATGCAGG AGATGGAAGG      540
CTGAGCGTTT CTGTTCTTG ACCATTCCC GGTGGCTCG AG                               582
```

(2) INFORMATION FOR SEQ ID NO:227:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 461 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

```
GAATTCGGCC AAAGAGGCCT AAAAATTAT AAATAAGTGA GACTACTGCC CCCTAGCCTA      60
AAATTCATTG CCTGCGCTCA CTCAACATCA TAGTCTTTA GGAAGACAAG TTGTTCTATA      120
GCATAAGAT ACAACCTATT TAGATAGTCT AAAGATTCTC CTCTGTTTCT CAAATACAGT      180
CAGTTATGCA GCTCAAAATG CCTCTCATTT TCCTGCTTTT TTTTCTTCTA CTATTGTGTC      240
CTCCAGGCTT TGCAGAAACA CATGTTATTC TCCCCCTAAA ATCTGTTTCT CTCTAGTTT      300
TCTCTCTGCC AGCAATGGCA CCACACAGTC TTTTGGTTT GCACCAGAGA ATTAGAGATG      360
AACCCCTCAT CTCTAATCTA TCACAAGTTT CCTCAGATTT AAACCTCTAA ATCAAGATGT      420
TTCTACCAT TTCCATTACT ATTGTCCCA GCTTCTCGA G                               461
```

(2) INFORMATION FOR SEQ ID NO:228:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 133 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

```
GCCTAAACCG TCGATTGAAT TCTAGACCTA TCTCGAGAAA GAGTTGTTCT GGAAAGAAAT      60
GAAGAAAAGA GCAGAACCAA TCTCAAGCAG CCAAGTGGTG AAGTTGGATG TATGTGACCC      120
TACGTCTCTC GAG                               133
```

(2) INFORMATION FOR SEQ ID NO:229:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 482 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

```
GAAAGGGATC AAAAAGAAAA AGTGATCGAA TGAATCTAC TGATACCAA CGACAAAAGC      60
CTTCTGTCCA TTCAAGACAA CTGGTTTCTA AGCCACTGAG CTCATCTGTT AGCAATAACA      120
AAAGAATAGT TAGTACAAA GGAAAGTCAG CCACAGAGTA TAAAAATGAG GAATATCAAA      180
GATCTGAAAG AAACAAGCGT CTAGATGCTG ATCGGAAAAAT TCGTCTATCA AGTAGTGCCT      240
CCAGAGAAAC TTATAAGAAT CAACCTGAAA AAACCTGTGT CCGGAAAAGG GATCCTGAAA      300
GGAGGGCCAA ATCTCCTACG CCAGATGGTT CTGAGAGAAT TGGGCTTGAA GTGGATAGAC      360
GTGCAAGCAG ATCCAGCCAG TCTTCTAAGG AAGAAGTGAA CTCTGAAGAA TATGGCTCTG      420
ACCATGAGAC TGGCAGCAGT GGTCTTCTG ATGAGCAAGG GAACAACACT GAAATCTCG      480
AG                                                                                   482
```

(2) INFORMATION FOR SEQ ID NO:230:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 501 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```
GAATTCGGCC TTCATGGCCT AGGGGATAAA TGTAAGCTTG TTAAAGTAAG CACCACACCA      60
TGTTTCTGTC TCCCCAGCAC CCAGCACAGT GCTGTGAACC TTGGCAGATG CTAGATAAAT      120
GTGTGTTGAA TGAATGTGCC TATGAAGCCA CAAAGATGCC ACATGTTAGT ATATCAGTGA      180
GAGGTGACTC CACAGTGCTC TCTGGAGAAG CAATATGAGT GACTGAAGAG TGGGGCCTTT      240
TGCTTTTGCC TGGATATAGG GGTGCTCTTC TACTGTAAT GGGTGTGGAA AAACCTCTGGC      300
TTTATGGTAT TCCATTAGGT TCTTTTCATT TAAAGTAGTC TTTAAATCAA AGTATCCAAT      360
ATTTTAAAGC CACAAAGTAG ATTACATAAT TAGCAGAGAT TTTAGTCAGT AAAATGTTAG      420
AAATCAAACCT ATAAGAAAAT TCAAGTCCTT TATTTTGTGT CTTGGGTATA TGTCAATTAT      480
TTAAATTCCA CAGCTCTCGA G                                                                                   501
```

(2) INFORMATION FOR SEQ ID NO:231:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 326 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```
GAATTCGGCT TCGATTGAAT TCTAGGACTT GACAGAATTC GAGTTATCCT TCTCAGAACA      60
TGTGCAGAGT CTCTTTTIGC CTCACCATGT GGTCTGTGTC TCTTTCAGGT GGGAGTTTTG      120
GGGCCTCCAG GGCAGCAGGC ACCACCTCCA TATCCCGGCC CACATCCAGC TGGACCCCTT      180
GTCATACAGC AGCCAACAAC ACCCATGTTT GTAGCTCCCC CCCAAAGACC CAGCGGCTTC      240
TTCACCTCAGA GGCCTACCTG AAATACATTG AAGGACTCAG TCGGAGTCC AACAGCATTG      300
```

GCAAGTGGGA TCAGAGCAAT CTCGAG

326

## (2) INFORMATION FOR SEQ ID NO:232:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

```

GAATTCGGCC TTCATGGCCT AATCAGAAGC TTTTCAAAT TCCGTCTTCA AGAAGAAACA      60
CCCGTGGAGG AAGAAGACAT TATACAAAAC AAATTTAGAA ACTGGGATCA TGAGTGGAAA      120
AACAAAGGCA AGAAGGGCTG CCATGTTTTT TAGACGTTGC TCTGAAGACG CCAGCGGTAG      180
CGCCAGTGGC AATJCTTTGT TATCAGAGGA CGAAAATCCT GATGCGAATG GGGTAACTCG      240
ATCATGGAAG ATTATTCTAA GTACAATGCT TACACTGACT TTTCTTCTTG TAGGACTCCT      300
AAATCATCAG TGGCTTAAAG AAACAGATGT TCCTCAGAAA TCCAGACAAT TATATGCCAT      360
GCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:233:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

```

GAATTCGGCC TTCATGGCCT AAAGAAGAAT TGACACCTCT TGGAGTCCAC TTGGCAGCAT      60
TACCCGTTGA GCCACATATT GGAAAAATGA TTCTTTTGG AGCACTGTTT TGCTGCTTAG      120
ACCCAGTACT CACTATTGCT GCTAGTCTCA GTTTCAAAGA TCCATTGTC ATTCCACTGG      180
GAAAAGAAAA GATTGCAGAT GCAAGAAGAA AGGAATTGGC AAAGGATACT AGAAGTGATC      240
ACTTAACAGT TGTGAATGCG TTTGAGGGCT GGGGAAGAGG TAGGCGACGT GGTTCAGAT      300
ACGAAAAGGA CACTTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:234:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 358 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

```

GAATTCGGCT TCATGGCCTA CGATGAGGCT GCTGTCATTG GTGGTGTGG CTCTATTGTC      60
TGTCACCTCA GCAGAGGAAG GAGCCAGGCT TTTGGCTTCC AAATCACTGC TGAACAGATA      120
CGCCGTGGAG GGACGAGACC TGACCTTGCA GTACAACATC TACAATGTTG GCTCAAGTGC      180
TGCATTAGAC GTGGAACTAT CTGATGATTC CTTCCCTCCA GAAGACTTTG GCATTGTGTC      240
TGGAATGCTC AATGTCAAAT GGGACCGGAT TGCCCTGCT AGCAATGTCT CCCACACTGT      300
GGTCCTGCGC CCTCTCAAGG CTGTTATTT CAACCTCACC TCGGCAACAA TCCTCGAG      358

```

## (2) INFORMATION FOR SEQ ID NO:235:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 513 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

```

GAATTCGGCT TCATGGCCTA GTTGACGTA ATGTATTAT ATGTTAATT GTTATGTATA      60
TAGATGTGCA AGTCTTGTC GAATTGGCCT CAGTGTAGTT AAAGGGCAGA AGGGGAAGAT      120
ACTGACTAGT CATAGAAATA CCTCATTCGC CTGTGGGAAG AGAAGGGAAG CCTCTTCAGG      180
GTGAGTGAAT GGCAAGCGG TTGCTTCTGG CTCCTCCTTC CCCTGTGGTC TTGGAAGTGT      240
GTGGAAGGCA GGGACAGAGA TGGAGGCCGA GCCAATAGAC TGAAGAGACC ACAGCAATTG      300
GCTCCTCCAT CTAGAGATTT TCTTGGCAGT ATTCCATGGG ATGTTAAGCA AAGGAAACCA      360
AAGGAATCGT TTCAAATGGA CTCATGGCTT AGAAATCTTT ATTCTTAGGG CAGTCAGTAG      420
TATTCTAAAG CTTTCTGACA AGATAAAGGA AGTCACCAA ATTTCCTTTT TAAATTGTA      480
TCTAATCCTC AACAACAAAC CAAACTCTC GAG                                     513

```

## (2) INFORMATION FOR SEQ ID NO:236:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 412 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

```

GAATTCGGCC TTCATGGCCT ACTTGAAAT GTTGTATGCT ACTCTGAAAG ATCGAGAACT      60
GAGCTTTCAG TCGGCTCCAG GTACTACCAT GTTCTGTCAT TGGCTAGTGG GAATGGTATA      120
TGTCTTCTAC TTTGCCTCCT TCATTCTACT ACTGAGAGAG GTACTTCGAC CTGGTGTCCCT      180
GTGGTTTCTA AGGAATTTGA ATGATCCAGA TTTCAATCCA GTACAGGAAA TGATCCATTT      240
GCCAATATAT AGGCATCTCC GAAGATTTAT TTTGTCAGTG ATTGTCTTTG GCTCCATTGT      300
CCTCCTGATG CTTTGGCTTC CTATACGTAT AATTAAGAGT GTGCTGCCTA ATTTTCTTCC      360
ATACAATGTC ATGCTCTACA GTGATGCTCC AGTGAGTGAA CTGTCCCTCG AG          412

```

## (2) INFORMATION FOR SEQ ID NO:237:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 337 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

```

TTCATGGCCT AGAGATATGC TTCTTTGTAC CAATATGGAA AATCTAAAG AAAAAACCCA      60
CACTCAGCAC TATGAATGTT ATAGGTACCA AAAACTGCAG AAAATGGGCT TTACAGATGT      120
GGGTCCAAAC AACCAGCCAG TTAGTTTCA AGAAATCTTT GAAGCCAAA GACAAGAGTT      180
CTATGATCAA TGTGAGAGG AAGAAGAAGA GTTGAAACAG AGATTATGC AGCGAGTCAA      240
GGAGAAAGAA GCAACATTTA AAGAAGCTGA AAAAGAGCTG CAGGACAAGT TCGAGCATCT      300

```

TAAATGATT CAACAGGAGG AGATAAGGAA GCTCGAG

337

## (2) INFORMATION FOR SEQ ID NO:238:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 750 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

```

GAATTCGCGC ATTCGGTACA ACAAGAGAGA TAAACGATGA AACC GTTACA TTATACAGCT      60
TCAGCACTGG CGCTCGGACT GCGGTTAATG GGAATGCAC AGGCAGTGAC GACCATTCCG      120
TTCTGGCATT CTATGGAAGG GGAAGTGGT AAAGAGGTGG ATTCTCTGGC CCAACGTTTT      180
AACGCCGAAA ACCCGGATTA CAAAATTGTA CCGACCTATA AAGGCAACTA CGAACAGAAT      240
TTAAGCGCGG GGATTGCCGC ATTTCTGACC GGCACGCGC CGGCTATTTT GCAGGTTTAT      300
GAAGTTGGCA CCGCCACCAT GATGGCGTCG AAAGCCATTA AACC GTGTGA TGACGTGTTT      360
AAAGAGGCAG GGATTCAGTT CGATGAGTCG CAGTTTGTGC CGACGGTTTC AGGTTACTAC      420
TCCGACAGCA AAACGGGGCA CTTACTCTCC CAGCCATTCA ACAGCTCGAC CCCC GTTCTC      480
TATTACAACA AAGACGCCTT CAAGAAAGCA GGATTAGACC CGGAACAGCC GCCGAAAACC      540
TGGCAGGATC TGGCGGACTA TGCCGCGAAA CTGAAAGCCT CCGGCATGAA GTGCGGCTAC      600
GCCAGCGGCT GGCAGGGCTG GATCCAACTG GAAACTTTA GCGCCTGGAA CGGTCTGCCG      660
TTTGCCAGCA AAAACAACGG CTTTGACGGC ACGGACGCGG TGCTGGAGTT CAATAAGCCC      720
GAGCAGGTGA AACACATCGC CATGCTCGAG                                     750

```

## (2) INFORMATION FOR SEQ ID NO:239:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 490 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

```

GAATTCGGCC TTCATGGCCT ACTTACAGAA CCTATTCAGT GGGAAGGAAG CCCTCATTAT      60
AATGATTTTC ATTCTTATGT GTGTTTCAGG ACGACTGGGT TTGGATTTCAG AAGAGGATTA      120
TTATACACCA CAAAAGGTGG ATGTTCCCAA GGCCTTGATT ATTGTTGCAG TTCAATGTGG      180
CTGTGATGGG ACATTTCTGT TGACCCAGTC AGGCAAAGTG CTGGCCTGTG GACTCAATGA      240
ATTCAATAAG CTGGGTCTGA ATCAGTGCAT GTCGGGAATT ATCAACCATG AAGCATACCA      300
TGAAGTTCCC TACACAACGT CCTTTACCTT GGCCAAACAG TTGTCCTTTT ATAAGATCCG      360
TACCATTGCC CCAGGCAAGA CTCACACAGC TGCTATTGAT GAGCGAGGCC GGCTGCTGAC      420
CTTTGGCTGC AACAAGTGTG GGCAGCTGGG CGTTGGGAAC TACAAGAAGC GTCTGGGAAT      480
CAACCTCGAG                                     490

```

## (2) INFORMATION FOR SEQ ID NO:240:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 425 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

```

GAATTCGGCC TTCATGGCCT ACTTCTGGAC TCTATAGAAC CCACTGCCTC CTGATGAAGT      60
CCCTACTGTT CACCCTTGCA GTTTTATGTC TCCTGGCCCA ATTGGTCTCA GGTAAATTGGT      120
ATGTGAAAAA GTGTCTAAAC GACGTTGGAA TTTGCAAGAA GAAGTGCAAA CCTGAAGAGA      180
TGCATGTAAG GAATGGTTGG GCAATGTGCG GCAAACAAAG GGAATGCTGT GTTCCAGCTG      240
ACAGACGTGC TAATTATCCT GTTTTCTGTG TCCAGACAAA GACTACAAGA ATTTCAACAG      300
TAACAGCAAC AACAGCAACA ACAACTTTGA TGATGACTAC TGCTTCGATG TCTTCGATGG      360
CTCCTACCCG TTTCTCCAC TGTTGAACA TTCCAGCCTC TGTCTCCTGC TCTAGGATCC      420
TCGAG                                         425

```

## (2) INFORMATION FOR SEQ ID NO:241:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

```

GAATTCGGCC TTCATGGCCT AACCAGAACT AATTGCTAA GTCTTTTGTG TAGTCCTGCA      60
AGACTGATGC TTAATACACA GTCTGTTCTC CTGTGTCTAG GTCAGGAACT CCAGTTTGCT      120
TTTCTGTTTT GTGTCCTGGT AGCAGCTGTT GAGTAACCTT CATTGGAGGT TGGGAAGGAA      180
GTGAGGAGAA AGTGTTCTTG TTTAGTGTTT TATTTCTAT AATAGGATGC TGCCCTAACCC      240
AGTTCATCTC TATGTCCTGT TCACTGAATA TTCCGGGTAA TTGAAAGAAA ATATAATGGA      300
TGGGCTCCAT TAAAACCAGC TCAAAAATAA ATTCTTGTCG GTAAAGATT CTGTCAAGA      360
TGTCTTGGAT TGCACTTTTG TTGAGGAAAG ACAGTGTAAG TAGTTAAAGA ATGTTGATAA      420
AATTGAAACA TTTGGTTGTG GAATTGTGTG TGGTACTCGA G                                         461

```

## (2) INFORMATION FOR SEQ ID NO:242:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

```

GAATTCGGCC TTCATGGCTT ATGGACAAGG AAGCATTGAG AGCATGGTGT CATCTGACTC      60
CACATCACCA GATTCTTCTT TAACAGAAGA ATCACGTTCT GAGACAGCCA GTAGTTTATC      120
CCAGAAGATT TGTAATGGGG GATTATCTCC TGGTAACCCA GGAGATTCTA AGGACATGAA      180
GGAAATTGAG CCCAATTATG AAAGTCCCTC TAGTAATAAT CAGGATAAAG ATTCATCACA      240
GGCTTCCTAA AGCTCAATAA AAGTTCCAGA GACCCACAAA GCAGTCCCTG CTCTCCGATT      300
AGAAGAGAAA GATGGCAAGA TTGCTGTACA AACTGAGAAG GAAGAAAGTA AAGCCTCTAC      360
AGATGTTGCT GGGCAAGCAG TAACCATAAA CCTTGTCCTC ACAGAAGAGC AAGCAAAACC      420
TTACCGAGTT GTGAACCTGG AACAGCCATT GTGCAAGCCA TATACTGTCT TGGATGTGTC      480
AGCAGCCATG GCCAGTGAGC ACCTCGAG                                         508

```

## (2) INFORMATION FOR SEQ ID NO:243:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCT | TCATGGCCTA | GGTTTTCTGT | ACATGGAGAT | TAAACTGTCT | TCCAAAGTGA | 60  |
| AGAGTTTATT | GTTCTAGATC | TTGAGCACAA | AGGTGGGTAT | ACGTTAATAA | AAAAAATAGC | 120 |
| AAGGGAAGAA | AATCATTTCC | TTCATACCAA | GTAAGAGAGC | ACTTATCATG | GTAGGCACTG | 180 |
| GCTTTGCAAT | TATGAGACCA | GTAAGAGAAA | TAGCTTTAGT | TTCTCAATT  | TTCTGGAGT  | 240 |
| ATTCTTCAGA | CTTTCTTTAC | ACTGCTCAAG | GTGGGGCGAG | TGGCAGGGCG | GACCTGGCG  | 300 |
| ACCTGACGCT | GCGGAGGCTC | GAG        |            |            |            | 323 |

(2) INFORMATION FOR SEQ ID NO:244:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 396 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGCTTCAGTA | GCAAATAAGG | ACATCATCTG | CTATAACCTA | 60  |
| CAAGCAGTTG | GACAGATATT | CTACATTCC  | TCATTCTCT  | ACACCGTCAA | TTACATCTGG | 120 |
| TATTTGTACA | CAGAGCTGAG | GATGAAACAC | ACCCAGAGTG | GACAGAGCAC | ATCTCCACTG | 180 |
| GTGATAGATT | ATACTTGTCG | AGTTGGTCAA | ATGGCCTTTG | TTTTCTCAAG | CCTGATACCT | 240 |
| CTGCTATTGA | TGACACCTGT | ATTCTGTCTG | GAAATACTA  | GTGAATGTTT | CCAAAACCTC | 300 |
| AGTCAGAGCC | ACAAGTGTAT | CTTGATGCAC | TCACCACCAT | CAGCCATGGC | TGAACTTCCA | 360 |
| CCTTCTGCCA | ACACATCTGT | CTGTAGCACA | CTCGAG     |            |            | 396 |

(2) INFORMATION FOR SEQ ID NO:245:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 370 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGCTTA | GCCTCAGCTC | TTTCTTCTGG | GTGTTTGTA  | TTTTCTTTTC | 60  |
| TGTCCCAAAC | AGTTTCCCCC | ACAAAAAGAA | CTTTATGTCT | TTCTCTGTCT | TCCCTCAGTC | 120 |
| CTTCCAGTCA | GCAGCCTGTG | ATTGGGCTTT | TCCCCTCAGA | AACGAACAAT | CCAGAACCCA | 180 |
| CTGTTTAAAA | CAACTGTATT | TTGCCTTGGG | AAGTCCCAT  | GCCTTCCCTG | AAAACATTAA | 240 |
| ACATTCCTCC | GATCCCCAGC | CTGAGTCTCT | CTGTCTCTGG | GCCCCATCCT | GCTCCACAGC | 300 |
| AGGGCTGGTG | TGTCCAGCAC | AGAGTGACCC | TCCGATGCCC | TTTCCCACCC | GCCGCCCTGC | 360 |
| CTCCCTCGAG |            |            |            |            |            | 370 |

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 367 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

```
GAATTCGGCC TTCATGCCTA GAGAACTTGA AGCTTTGCGG CAGGAATTTA AAAAGAAAGA      60
CAAGACGTTG AAAGAGAATT CCAGAAAGTT GGAGGAAGAA AATGAGAATC TCCGAGCAGA      120
GCTACAGTGT TGTTCACAC AACTGGAATC CTCTCTCAAC AAATACAACA CCAGCCAGCA      180
AGTCATCCAA GACTTGAATA AAGAGATAGC CCTTCAGAAG GAGTCCTTAA TGAGCCTGCA      240
GGCCAGCTG GACAAAGCTC TGCAGAAGGA GAAGCACTAT CTCCAGACTA CCATACCCAA      300
AGAAGCCTAT GATGCATTAT CCCGGAAGTC AGCCGCCTGC CAGGATGACC TGACACAAGC      360
CCTCGAG                                         367
```

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 450 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

```
GAATTCGGCC TTCATGGCCT ACGGCTTCAT AGTAACTCTT TGCCATATCT CTAGCCAGCT      60
GCATAAAACG TTCGCCATCA GATGGAGACA AAAGGTTTAA AATACGCCCTA TAACCATCCA      120
TGGCCATTTT ATGATCACCC ATCTGTTTCT AAAGGCTTGA TCGTCCCCAC AGATAACGGA      180
CATTAGTAGG TTCATATTTA AGAGCTTTTG TATAGCAAAA AATAGCCTGC TTAATATTGT      240
CTTGTTCAG AGACATTTCT GCCAGTCTAA CCCATTCTTC TGTGTCAGTG GGATTTAAAT      300
GCGCAGCAAT CAACTCAAAC TGCAATGATT TTCCATGTC ACCTTGGTCC TCATATATCA      360
TGGCTAGAGT AGAGAATGGC TCATAAGCCA GAGGAGCTTG TCTTATGATT TCCATGCACA      420
TCAATATCGC CTCTTCACGT TCTCCTCGAG                                         450
```

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 408 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

```
GAATTCGGCC TTCATGGCCT AACGAACTG ACGTCTACCT CATGGGGCTG CTGTGTGGGT      60
TTGGGAGGCA AAAATCTATG AAGGGTTTTT TGAAATCCCA TAGGTGCCAC ATCTATGAGA      120
TGTTTGATAA ATGTGAATAT GCTTTTACAT TTGGGCTTAT CTAATTTGCA ATAAGAGAGC      180
CTCTCTCTAT CAACACCAGC TTCTCTCTCG GGCTGTTTGC TCAGGGAAGG CAAGAAAGCC      240
ACGTGCTGGC CCTCTGCCTT CTCTAAAGTG CTGTTGGAGC ATGGAGGAGC TGGAGGAGAT      300
GGGGATGGAC TGACAGCTAA GAGGGCGGCT GCTGGGACTA GATAGTGGAT GAAGAAAGAA      360
GGACGAGGAA GCCGTGGGCG AGCCTCTTCA CATGGGGACG AACTCGAG                                         408
```

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

```

GCCCATGACA GAGAGCAGTG CCAAAGACAT GGCGTACGAA CATCTGATAG ATGACTTATT      60
GGCTGCTCAG AAGGAAATTC TGTCTCAGCA GGAAGTCATC ATGAAGTTAA GGAAAGACCT      120
TACCGAAGCC CACAGCAGAA TGTCGGATTT GAGAGGGGAG CTAAACGAGA AGCAGAAGAT      180
GGAAC TGAG CAGAACGTGG TGCTGGTCCA GCAGCAGAGC AAGGAGCTGA GTGTGCTCAA      240
GGAGAAGATG GCCCAGATGA GCAGCCTGGT AGAAAAGAAA GATCGGGAGC TGAAGGCCCT      300
TGAGGAGGCA CTCAGGGCTT CCCAAGAGAA ACACAGACTC CAGCTGAACA CAGAGAAGGA      360
ACAGAAGCCC CGGAAGAAGA CCCAGACGTG TGACACCTCT GTGCAGATAG AACCCGTCCA      420
CACTGAGGCC TTCTCCAGCA GCCAAGAGCA GCAATCCTTC AGCGATCTAG GGGTCAGGTG      480
CAAAGGGTCC CGGCACGAGG AGGTCATTCA GCCTCAGAAA AAGGCCTTAT CTGAACTTCG      540
AGCGCGAATT AAAGAACTCG AG                                         562

```

(2) INFORMATION FOR SEQ ID NO:250:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

```

GAATTCGGCC TTCATGGCCT ACCCAAACAG ACAGAAAACG CCACGAGGCA AGTGTAGTCT      60
CTCACAGCCT GGACCCTCTG TCAGCAGTCC ACATAGCAGG TCCACAAAAG GTGGCTCCGA      120
TTCTCTCCTT TCTGAGCCAG GGCCAGGTGG GTCCGGCCGC GGCTTCCTGT TCAGAGTCTT      180
CCGAGCAGCT CTTCCCCTTC AGCTTCTCCT GCTCCTCTC ATCGGGCTTG CTGCCTTGT      240
ACCAATGTCA GAGGAAGACT ACAGCTGTGC CCTCTCCAAC AACTTTGCCC GGTCATTCCA      300
CCCTATGCTC GAG                                         313

```

(2) INFORMATION FOR SEQ ID NO:251:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 291 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

```

GTCTTGACAA AACCTAATT GCGCAGAAAA CAAGATGAGA TTGGCATGGC TTTATTTGTT      60
TTTTTTGTTT TGTTTGGTT TTTTTTTTTT TTTTGGCTTG ACTCAGGAGA TCCCTCCCCG      120
GGGCTCCCGC CGGCTTCTCC GGGATCGGTC GCGTTACGCG ACTGGACGCC TCGCGGCGCC      180
CATTTCGCGC ACTCCGATT CGGGGATCTG AACCCTGACT CCTTTCGATC GGCCGAGGGC      240
AACGGAGGCC ATCGCCCGTC CCTTCGGAAC GGCCTCGCC CAACTCTCGA G                291

```

(2) INFORMATION FOR SEQ ID NO:252:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 384 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

```

CGGGAAATGA AGCGGAAGCA GCGGAGTCC GAGAGGCCCA TCTTGCCAGC CAATCAGAAG      60
CTCATTACTT TATCAGTGCA AGATGCACCC ACAAAGAAAAG AGTTTGTAT TAACCCCAAC      120
GGGAAATCCG AGGTCTGCAT CCTGCACGAG TACATGCAGC GTGTCCTCAA GGTCCGCCCT      180
GTCTATAATT TCTTTGAATG TGAGAACCCA AGTGAGCCTT TTGGTGCCTC GGTGACCAT      240
GATGGTGTGA CTTACGGATC TGAAGTCA AGCAGCAAAA AACTTGCGAA GAATAAAGCT      300
GCCCAGCTA CACTGGAAT CCTCATCCCT GACTTTGTTA AACAGACCTC TGAAGAGAAG      360
CCCAAAGACA GTGAAGAACT CGAG                                         384

```

(2) INFORMATION FOR SEQ ID NO:253:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 276 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

```

GGGACGTTGG TGTTGAGGTT GGCATACGTA TCAAGGACAG TAACTACCAT GGCTCCCGAA      60
GTTTGGCCAA AACCTCGGAT GCGTGGCCTT CTGGCCAGGC GTCTGCCGAA TCATATGGCT      120
GTAGCATTCTG TGCTATCCCT GGGGGTTGCA GCTTTGTATA AGTTTCGTGT GGCTGATCAA      180
AGAAAGAAGG CATAACGAGA TTTCTACAGA AACTATGATG TCATGAAAGA TTTTGAGGAG      240
ATGAGGAAGG CTGGTATCTT TCAGAGTGTA CTCGAG                                         276

```

(2) INFORMATION FOR SEQ ID NO:254:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 497 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

```

GAGTTGTGTG GGCTTACCTT ATTTTAATTA AAAAGAAGTC GGGGCTACCA GGGGTTTCAG      60
ACGTGCTCGA TGGACACGTG ATTTGTAAAC AGCCAAGATT CTGGGGGACG GGGGGGTGCC      120
TCGGTGGGGT TGACATTGGA GTTACAGGGA CTTAATAATG GCCAGCCTTT CACATCCCAT      180
GGGAAACCGC CCCCCGGGCT CTTGGAGAAT GGGGGTCCAA GTGCCTATCC CCCTTTGGAT      240
GTAAAATTCA TCGTTAGTAA ACATCATCCG CCCAGCAACA AGCAAAGCAC ATCGCAAGAT      300
TAAACAAAG AATCCGCCGT GAACAGAAGG CCTCCATCTC TGCTCTCAGG CAGGTGTCCT      360
TCAGGGAGGA GCCTCAGGCA GCTGTTCTAA CCCTGCTGCC AACGCCGGG CTGTTTCTGC      420
CGACAATCTT CTATTCTCT AAAAGAGTAC GCTGAACAGC TGGCTCTGCG TTGATTGAAT      480
CTAGACCTG CCTCGAG                                         497

```

(2) INFORMATION FOR SEQ ID NO:255:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

```

GAATTCGGCC TTCATGGCCT AGAGAACCGT TGCTTTTCCG AGTTGCTCTT CTTCAGGCT      60
CCGTGCGTGG TCGGCATGGC CCGTGGAAAT CAACGAGAAC TTGCCCGCCA GAAAAACATG      120
AAGAAAACCC AGGAAATTAG CAAGGGAAAG AGGAAAGAGG ATAGCTTGAC TGCCTCTCAG      180
AGAAAGCAGA GGGACTCTGA GATCATGCAA GAAAAGCAGA AGGCAGCTAA TGAGAAGAAG      240
TCTATGCAGA CAAGAGAAAA GTGATGACTG GCTATTTGGA AAACCTGGGT GCTACTGCCA      300
ACTGGGTGTA TCATAAGCTC TAAGATCAAG ATTTTGTAGA GTGGACAGTC ATTACATATG      360
TTATAACTTA TCCTTTAAAA ACTATTTTAA ACTTTATCCT TTCAGCTTTA CTTAGTGCGA      420
TGTTTGTAGG GCAGTCTTCA AAGAATAAAA CACTAACCAT GCTGCTCGAG      470

```

## (2) INFORMATION FOR SEQ ID NO:256:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

```

GAATTCGGCC TTCATGGCCT AATTTTGTAT TTTTAGTGGA GACGGGGTTT CTCCATGTTG      60
GTCAAGCTGG TCTTGAATC CCAACCTCGG GTGATCCGCC CGCCTTGGCC TCCCAAAGTG      120
CTGGGATTAC AGGCGTGAGC CACCGCGCCT GGCCAGTAGT TTCTTAACAT TAAATTATCC      180
GCAAAATGGA AGAAATACTA GAGGTCTGTG AGGATGTTTC TTCTCTTTCA GTCTGTTGTG      240
GTGGTTTGTA GTTTACAGGG GCTTGGGTAA CTGGATTTT AGGTTTATTA TTTTAAATAG      300
TAGACTCAAC ACTATTTTGT ATTGCAGTAG AGATCACTTA TGCAGATCTT TTTAATACCA      360
TTTCATAGAG ATTAAGGGTC ACCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:257:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```

GAAACAGGGC TCAAAGAAGT GGTAACCTGCT GTGGAGGAAA TGACAAGTAA AGGAAAACCA      60
GGACAAGAAG TCTTGGAAGA CGACCAGGAA AATACTTTAA AATATGAGTA TGAAGAAGAC      120
TTTGAAGTAG ATGAGGAGAA ACAAGGTGAA AAATCTAATG AAGAAGGACA GGCTGATGTT      180
CAAATGAATG GAATACCGCA GTCACCTTTG GATGATAAAA AAGATAATTT AGACCCGTAA      240
AAAGAGAGTG AAACCTCATC ACAGAAGGCA CCAGATGCCC GTGACAATGT GAAAGATGAG      300
AATGATGGAT GCTCTGAGAG TGAACGTCTC GAG

```

## (2) INFORMATION FOR SEQ ID NO:258:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```

CACAGTGCTG GNTCACAACA AGATGNTCNA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC      60
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTC      120
GGACGGCGGT AATTTCCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA      180
GGAAGTCGGA CAGTGGAAACA AATTCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG      240
AAAACCCTTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAAATGTAG      300
TCGCCATAAA GTATGCATTG CTCAAGATTG TCAGACTGCA GTCTGCATTA GTCACCGGAG      360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT      420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGCCCT GTTTGTGGTT CAGATGGTCA      480
TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT      540
CGAG

```

## (2) INFORMATION FOR SEQ ID NO:259:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```

GAATTCGGCC TTCATGGCCT ACATCAGCAT CCCTGGGAGC ATCAGAAATG CAGAGCTCAG      60
GCCCGCCCCG GAGCTACCGA ATCAGAACCT ACATTTTACA CACCCCTCAG CTCAGAGCTT      120
GTTTCTCCCT GGATTCCATG GGCCTGTGCT GCTGGCAGCC CGGGGTTAGG GCATTTGCTT      180
GTCACCTGGC GACGGTGAAG CCTAGTTTCC TCCAGAGAGA TTATGCTGCT CTCATCCAA      240
GTGAAGTGGC AATGGTGCCA GCCTGAGATT TCTGCCCTGA GTTTTAAGTA CGAGAGTGTG      300
GGCTGACAAT AACTCCTTT ATTCTACCCCT CTTCTGTTCT CATAAGGAGA AATTAAAT      360
CTGGAAGAGA TGAAGCTTGC ATTTACCCAA GAC

```

## (2) INFORMATION FOR SEQ ID NO:260:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 705 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```

GAATTCGGCC AAAGAGGCCT AAGGGATTGT TATTCCTTTA AAAAAAACC AATACCAAG      60
AAGCCTACAA TGTTGGCCTT AGCCAAATTT CTGTTGATTT CAACGTTGTT TTATTCATT      120
CTATCGGGGA GCCATGGAAA AGAAAATCAA GACATAAACA CAACACAGAA CATTGCAGAA      180
GTTTTTAAAA CAATGGAAAA TAAACCTATT TCTTTGGAAA GTGAAGCAAA CTTAAACTCA      240
GATAAAGAAA ATATAACCACT CTAATCTC AAGGCGAGTC ATTCCCCTCC TTTGAATCTA      300
CCCAACAACA GCCACGGAAT AACAGATTTC TCCAGTAACT CATCAGCAGA GCATTCTTTG      360

```

|             |            |            |            |            |            |     |
|-------------|------------|------------|------------|------------|------------|-----|
| GGCAGTCTAA  | AACCCACATC | TACCATTTC  | ACAAGCCCTC | CCTTGATCCA | TAGCTTTGTT | 420 |
| TCTAAAGTGC  | CTTGGAATGC | ACCTATAGCA | GATGAAGATC | TTTTGCCCAT | CTCAGCACAT | 480 |
| CCCAATGCTA  | CACCTGCTCT | GTCTTCAGAA | AACTTCACTT | GGTCTTTGGT | CAATGACACC | 540 |
| GTGAAAACCTC | GTGATAACAG | TTCCATTACA | GTTAGCATCC | TCTCTTCAGA | ACCAACTTCT | 600 |
| CCATCTGTGA  | CCCCCTTGAT | AGTGGAACCA | AGTGGATGGC | TTACCACAAA | CAGTGATAGC | 660 |
| TTCACTGGGT  | TTACCCCTTA | TCAAGAAAAA | ACAACTCTAC | CTACC      |            | 705 |

## (2) INFORMATION FOR SEQ ID NO:261:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 729 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT  | ACCTTACTTG | AGTCCACAGG | CAAGGCCCAA | TAATGCATAT | 60  |
| ACTGCCATGT | CAGATTCCCTA | CTTACCCAGT | TACTACAGTC | CCTCCATTGG | CTTCTCCTAT | 120 |
| TCTTTGGGTG | AAGCTGCTTG  | GTCTACGGGG | GGTGACACAG | CCATGCCCTA | CTTAACCTCT | 180 |
| TATGGACAGC | TGAGCAACGG  | AGAGCCCCAC | TTCTTACCAG | ATGCAATGTT | TGGGCAACCA | 240 |
| GGAGCCCTAG | GTAGCACTCC  | ATTTCTTGGT | CAGCATGGTT | TTAATTTCTT | TCCCAGTGGG | 300 |
| ATTGACTTCT | CAGCATGGGG  | AAATAACAGT | TCTCAGGGAC | AGTCTACTCA | GAGCTCTGGA | 360 |
| TATAGTAGCA | ATTATGCTTA  | TGCACCTAGC | TCCTTAGGTG | GAGCCATGAT | TGATGGACAG | 420 |
| TCAGCTTTTG | CCAATGAGAC  | CCTCAATAAG | GCTCCTGGCA | TGAATACTAT | AGACCAAGGG | 480 |
| ATGGCAGCAC | TGAAGTTGGG  | TAGCACAGAA | GTTGCAAGCA | ATGTTCCAAA | AGTTGTAGGT | 540 |
| TCTGCTGTTG | GTAGCGGGTC  | CATTACTAGT | AACATCGTGG | CTTCCAATAG | TTTGCCTCCA | 600 |
| GCCACCATTG | CTCCTCCAAA  | ACCAGCATCT | TGGGCTGATA | TGCTAGCAA  | GCCTGCAAAA | 660 |
| CAGCAACCTA | AACTGAAGAC  | CAAGAATGGC | ATTGCAGGGT | CAAGTCTTCC | GCCACCCCCA | 720 |
| ACACTCGAG  |             |            |            |            |            | 729 |

## (2) INFORMATION FOR SEQ ID NO:262:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 686 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT  | ACTACCATGT | CCTCTTGGAG | CAGACAGCGA | CCAAAAAGCC | 60  |
| CAGGGGGCAT | TCAACCCCAT  | GTTTCTAGAA | CTCTGTTTCT | GCTGCTGCTG | TTGGCAGCCT | 120 |
| CAGCCTGGGG | GGTCACCCCTG | AGCCCCAAAG | ACTGCCAGGT | GTTCGGCTCA | GACCATGGCA | 180 |
| GCTCCATCTC | CTGTCAACCA  | CCTGCCGAAA | TCCCCGGCTA | CCTGCCAGCC | GACACCGTGC | 240 |
| ACCTGGCCGT | GGAATTCTTC  | AACCTGACCC | ACCTGCCAGC | CAACCTCCTC | CAGGGCGCCT | 300 |
| CTAAGCTCCA | AGAATTGCAC  | CTCTCCAGCA | ATGGGCTGGA | AAGCCTCTCG | CCCGAATTCC | 360 |
| TGCGGCCAGT | GCCGCAGCTG  | AGGGTGCTGG | ATCTAACCCG | AAACGCCCTG | ACCGGGCTGC | 420 |
| CCTCGGGCCT | CTTCCAGGCC  | TCAGCCACCC | TGGACACCCT | GGTATTGAAA | GAAAACCAGC | 480 |
| TGGAGGTCTT | GGAGGTCTCG  | TGGCTACACG | GCCTGAAAGC | TCTGGGGCAT | CTGGACCTGT | 540 |
| CTGGGAACCG | CCTCCGGAAA  | CTGCCCCCGG | GGCTGCTGGC | CAACTTCACC | CTCCTGCGCA | 600 |
| CCCTTGACCT | TGGGGAGAAC  | CAGTTGGAGA | CCTTGCCACC | TGACCTCCTG | AGGGGTCCGC | 660 |
| TGCAATTAGA | ACGGCACATT  | CTCGAG     |            |            |            | 686 |

## (2) INFORMATION FOR SEQ ID NO:263:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 571 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

```
GAATTCGGCC AAAGAGGCCT AGGAGAGAGG AGGTGCTGCA AGACTCTCTG GTAGAAAAAT      60
GAAGAGGGTC CTGGTACTAC TGCTTGCTGT GGCATTGGA CATGCTTTAG AGAGAGGCCG      120
GGATTATGAA AAGAATAAAG TCTGCAAGGA ATTCTCCCAT CTGGGAAAGG AGGACTTCAC      180
ATCTCTGTCA CTAGTCCTGT ACAGTAGAAA ATTTCCCACT GGCACGTTG AACAGGTCAG      240
CCAACTTGTG AAGGAAGTTG TCTCCTTGAC CGAAGCCTGC TGTGCGGAAG GGGCTGACCC      300
TGA CTGTAT GACACCAGGA CCTCAGCACT GTCTGCCAAG TCCTGTGAAA GTAATCTCC      360
ATTCCCCGTT CACCCAGGCA CTGCTGAGTG CTGCACCAA GAGGGCCTGG AACGAAAGCT      420
CTGCATGGCT GCTCTGAAAC ACCAGCCACA GGAATTCCTT ACCTACGTGG AACCCACAAA      480
TGATGAAATC TGTGAGGCGT TCAGGAAAGA TCCAAAGGAA TATGCTAATC AATTTATGTG      540
GGAATATTCC ACTAATTACG GACAGCTCGA G                                     571
```

(2) INFORMATION FOR SEQ ID NO:264:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

```
GAATTCGGCC AAAGAGGCCT ACCAAGCAAG AACAGCTAAA ATGAAAGCCA TCATTCATCT      60
TACTCTTCTT GCTCTCCTTT CTGTAAACAC AGTCACCAAC CAAGGCAACT CAGCTGATGC      120
TGTAACAACC ACAGAACTG CGACTAGTGG TCCTACAGTA GCTGCAGCTG ATACCACTGA      180
AACTAATTC CCTGAACTG CTAGCACCAC AGCAAATACA CCTTCTTTCC CAACAGCTAC      240
TTCACCTGCT CCCCCATAA TTAGTACACA TAGTTCTTCC ACAATTCTTA CACCTGCTCC      300
CCCCATACTC GAG                                     313
```

(2) INFORMATION FOR SEQ ID NO:265:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 343 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

```
GAATTCGGCC TTCATGCCTA GCCTCTGAGT TCAGCTCAGA ACACAGATGA TCTCATTGAT      60
TCCTCACGTC AACCTTGGGA AATCTGGGTA CCCTGGGACG TCCACACATG AGGACCGAGG      120
CTCAGGGACA TCAAGGGACT GGCCTGGTCC CAGAAACAGG GAGTAAAATG GGAAGTAAAC      180
TCAGTCCCAC GTCTGCCTGA CTCCAGAGTT TGGGCCACTG AACCATGCGG CTGCCATCTT      240
GGAGTTCTTT GAGCTGTGAA GTGCTGTGCA TCGTGTGATT CTGTGTCCTT TTGTGTCAGG      300
TACCAGGATT TCTATGCATT CGACCTGTCA GGAGCCACTC GAG                                     343
```

## (2) INFORMATION FOR SEQ ID NO:266:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

```

GAATTCGGCC TTCATGGCCT ACAGGAAGCA CAGAAAGACA AAATTGGAAA TGTCTAGTTC      60
CATGTTGATG CCTTCAGAAG ATGCAGGTGA ACAAAGAGAG GCCGGGAAAT CAGAGCTAGT      120
TGAAACCCAA CATGTTACCT TAGAGCCAGA GCTACCACTG AGTTCTCTAA GCACAGTCAA      180
ATCCCAGGAT TATGCTGAAA CAGAGCAGGA GGTCAATTTA CAAGCTATAG AGGCCATGGA      240
GGCCACAGAA GCCCTGGAGG CCACAGACGC CATGGAAGCC ATAGATCAAG GTAGCATGAA      300
AGATTATGGA GATGTTATCT CTAAGCTGGA AAGACTCGAG                                340

```

## (2) INFORMATION FOR SEQ ID NO:267:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```

GAATTCGGCC TTCATGGCCT AGGCACCCCT AGGCGACTCA GGGTTCGGGG AGGAGGAGAC      60
CAGACGGGGC CTTGGCTGGC ATGGCCTCTT CACAGGGCTG CCGTGAAGAA ACTTCGTGAC      120
AGCGGCGGAG AGGTGGCCCA GGAGTGAGAC AAGCAGGCCC CGGGCCTTGG ACTCAGACAT      180
GCTGGGTCCG GTCAGGCCCG TGTGGGAACC AGTGTTTTAG GGAAGTGGGT CTCTCTTAGA      240
GAAGAAGTGA TGCTAAAGAG TCAGGAAGAC ACGAGCGGGC CAAATAAAAG AGGAAGAGAG      300
GCCCTCAGGA CATCATGGCA CTTACTGCTT GGATTGTGCT CCCCCTCCAG AATTCTGTGG      360
ACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:268:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```

GAATTCGGCC TTCATGGCCT ACTTGGGAAT TAACATCTTC GATAAATCCC AGAAGTCTTT      60
AAGTGACAGT AGAGAGCCTA CAGAGAAGCC TGGGAAAGCA GAAAAATCTA AGAGCCCAGA      120
AAAAGTGTC TCGTTCTCAA ACTCCTCTC CAACAAGGAA TCAAAAGTAA ACAATGAGAA      180
GTTTCGTACT AAGAGCCCCA AGCCTGCCGA AAGCCCCCAG TCAGCCACTA AGCAGTTGGA      240
TCAGCCCACT GCTGCTTATG AGTATTATGA TGCTGGCAAT CACTGGTGCA AAGACTGCAA      300
CACCATCTGT GGGACTCGAG                                320

```

## (2) INFORMATION FOR SEQ ID NO:269:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 542 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```
GAATTCGGCC AAAGAGGCCT AGGCATATTT ACTGAGGGCC TACAGGGTGC CCAATACTGA      60
GCTAGCTAGG CTCAGGGACC TGTACACACA TGCATTCTCC ATTAGGGTTC TGCAATCCTG      120
ACACTATTAC TATCCTCAAG GACTCTGCGC ATCCAGAGCC GTCTATTAGT TAGCAATGAG      180
AACCCCTGCC ATGGCCAAGT TACACAAGAA CACCCTTGCC CTACCTCTGC CCCCTGCNGA      240
TCTGAAAGTA ACCTGGTCTG AAAGAGAAGT AAAGATGTGG CTGTCCCTGG GTGCTAGGGA      300
GAGAGGCCCTG TTGACAAAGC CACCAGCTGT CTCCAGTCAG AGCCAGGGAG ACAGGCCTTCT      360
CCCTGCACCA TCCGCACTGC CATAGACACA GCAGCCAGCA ACAGCACTTG GACCATTACG      420
GAGTTCAGG CCCAGTCTCC AACTGACCTC CCTCCTGCTC CAGCTGCCCA TGCTAACAAAG      480
AGCCAGGGCA CAAGACCTCA CTGGAACAA GTACCAGGCA GAAGAGAGCA TNACCNGCCG      540
GT
```

(2) INFORMATION FOR SEQ ID NO:270:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 613 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

```
GAATTCGGCC AAAGAGCCTA GTCGATTGAA TTCTAGACCT GCCTCCTTTT CCACTTGAAT      60
TGTTAAATG TTTACTCCAG CATCTTTAAG TATTCCTGTA ACCTGCTGTA CTATTCTTTG      120
TTCTAGCACA TCAGATGTCA CCGTATATG AATTGTTCTT GCCACAATAC TAGCAGAATG      180
ACGCCAAAAA TGTGGGTCTC GGTATGATAT TAATCCTTCA ATTTTCTGTA TCTTTTCTAA      240
AGCAATATGT AGTTCTTTTT CATATTCTGG TGGCAATCTC AGGAGTAGAA CCTGGCAGGC      300
ATCTTTAATC AGTGGAACAA CACTGAGAAA TATTAATATA GCAATAAAAA GAGAACAGAG      360
TGGGTCAGCG ATGAACCATC CAAACTGCTC TATAAGAACT GTGGATACGA TCACACCAAT      420
GCTGCCAAGA GTATCTGCCA AAACATGTAG AAATACACCC CTCATGTTAG CATTATGCC      480
TCCACCCGCA GATCCGTGGC TGTGACCATG CCCATGGTCA CTGTGTCCAT GCATATGATG      540
TGAATGGCTG TGATCAGATG AGTGACAGCT TCCTTGAGCC TAAACCGTCG ATTGAATTCT      600
AGACTGCCTC GAG
```

(2) INFORMATION FOR SEQ ID NO:271:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 763 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

```
GAATTCGGCC AAAGAGGCCT AGTCTGGTTC TTGCTTGATC TGAGAGCTTC CATCAGTCTC      60
TTTTATTCTT TCTGTGGCTG GAACTTCCAA CTGGCTTGGT TCAGCTGATT CTTGTATCAC      120
```

```

GGGGCCTTCT GACTCACTCT GATCAACCAG CTGGTTATTA ATCACAAGTC CTGGAAATGG      180
TCTAATGACC GTGAATTTGA TAAACTCGGC AGAGTCTAAG ATCCTTCTCA TGGAGCTGAT      240
TTCCAGGTAG CTGGGGGCTT TGAAAGGACA CCCC CGGGG CATGCCATCA ACTACCACAC      300
AGCCAGGGTT AATTGTGATT TCCCTGTAGG GAACTTTTAC AGGAAAACCC ATACCAATAG      360
CTTCACCAA TTTCCGACTA AAGAGGTCAT TCACTTGTTT TCTTAGCTGT CTAGCTTTT      420
CAACTTTTCA GAGTCTTTCA TTATCATCAT CTGGAATTGT CACCTGAATG ATGTTAAGGT      480
CTTCAACACC TGATGCAGTA GTATTAACAT TGGGTGATGA ATTTATTTT CTGGGAGGGC      540
TCTTAGAGGA GGTGCTCTCC TTAATCGCCG TCTCAAACAT TTCGGGCTTT TTAATGATGA      600
ACTTAATTTT GGCTTTGTTT CTGAGTATCT TCTCCAGCCT CGGAATGCCA AAAGTCGATG      660
GTCTTCGGAA TGGCACACCC TCAGGTAAGC CTTCCACATA AAAGTCTTCC GGGAAAGACT      720
CAAATAACGC GAACGGCACC TTCACAGCTT GTTTAAGGCC AAG                          763

```

## (2) INFORMATION FOR SEQ ID NO:272:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

```

GAATTCGGCC AAAGAGGCCT AATTAAGGAA ATACTTTGCA TAAATTAATC AGCCCCACAG      60
TATTTCCTTA ATAAGAATAA AATGAATTTA AACTGATTC TG                          102

```

## (2) INFORMATION FOR SEQ ID NO:273:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

```

GAATTCGGCC AAANAGGCCT ACNCCAGTCA AGGAAAGTCA AGTNGCAAGA AGGAANTGTC      60
TAAAAGAGAT GGCAAGGAGA AAAAAGACAG AGGAGTGACG AGGTTTCAGG AAAATGCCAG      120
TGAAGGGAAG GCCCCTGCAG AANACGTCTT TAAGAAGCCC CTGCCTCCTA CTGTGAAGAA      180
GGAAGAGAGT CCCCCTCCAC CTAAGTGGT AAACCCACTG ATCGGCCTCT TGGGTGAATA      240
TGGAGGAGAC AGTGACTATG AGGAGGAAGA AGAGGAGGAA CAGACCCCTC CCCACAGCC      300
CCGCACAGCA CAGCCCCAGA AGCGAGAGGA GCAAACCAAG AAGGAGAATG AAGAAGACAA      360
ACTCACTGAC TGAATAAAAC TGGCTTGTCT GCTTTGCAGA AGGCAGTTTC CCAATAAAGA      420
AGTTCTGATC AAACACCAGC AGCTGTCAGA CCTGCACAAG CAAAACCTGG AAATCCACCG      480
GAAGATAAAA CAGTCTGAGC AGGAGCTAGC CTATCTGGAA AGGAGAGAAC GAGAGGGAAA      540
GTTTAAAGGA ATAGGAAATC TCGAG                          565

```

## (2) INFORMATION FOR SEQ ID NO:274:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT ACTTAAATCA AGGCCAAAAC TAAGGATTTA GGTAGAGTGT | 60  |
| ATTAGCCTTT CAATACCTGC TTATTAAACA GTTGTTTTCA TACTTTTCAA AGGTGTGTAG | 120 |
| AAGTTTGTGA AATAAATTTT CTGATAGGAT AAAC TAGATT CCCTATGATC TCTTATTAT | 180 |
| TTATCATT  | 188 |

## (2) INFORMATION FOR SEQ ID NO:275:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGTCCGTGAT GCGTACACAC CTGTCGAGCA CGAGCTCCTC | 60  |
| TAGGCGGTGC AGGTCGCAGG CCACGTACTC CAGCGCCATG TCGGTGATNC GTGGGCACCA | 120 |
| CGAGAGGTCA AGGNTGCGCA GCTTGCGCAG GTTCTCGGCC ACGAGCTCCA CGCCGTGCTC | 180 |
| GGTGACCTTG GAGCAGCCCG AGAGGCTGAA CGCGGTGAGG TTGGGCAGGN TGTGCACCAC | 240 |
| GTTGACCACG CCGTGGTTGG TGATCTCCCA GCAGGAGAGC AGGCGCAGCG TGTGCGTGCT | 300 |
| GTGGCCCTGG CGCGCCGTGA AGTAGGCCAG CGCCGTGTCC GTCACGTGGT AGGCCTGCAG | 360 |
| GCTCAGCTCC GCCAGTTGG GCAGCAGCTG CGAGATGGCC GCGATGGCGT CGTCGGCCAC  | 420 |
| GTTGATGCAG TCACTCACGC TCAGCGAGGT GATGCGCGCG CTCAGGCTGG ACCACAGCCC | 480 |
| GGCCTCGGTG AAGTCGTTGC AGCCCGACAG CTCCAGACGC ACCACGCCCT GCATCTGTTC | 540 |
| AAGCATAACC TCGAG  | 555 |

## (2) INFORMATION FOR SEQ ID NO:276:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT ACAGTGAATA ATCAGAAGTC AGTTTGGGAG AAGTCAAAAT | 60  |
| GGACACAATC TTCTTGTTGA GTCTTCTATT GCTGTTTTTT GGAAGTCAAG CCTCAAGATG | 120 |
| CTCAGCTCAA AAAAATACCG AATTGTCAGT GGATCTTTAT CAAGAGGTTT CCTTATCTCA | 180 |
| TAAGGACAAC ATTATATTTT CACCCCTTGG AATAACTTTG GTTCTTGAGA TGGTACAACT | 240 |
| GGGAGCCAAA GGAAAAGCAC AGCAGCAGAT AAGACAACT TTAAAACAAC AGGAAACCTC  | 300 |
| AGCTGGGGAA GAATTTTTTG TACTGAAGTC ATTTTCTCTT GCCATCTCAG AGAAAAACA  | 360 |
| AGAATTTACA TTTAATCTTG CCAATGCCCT CTACCTTCAA GAAGGATTCA CTGTGAAAGA | 420 |
| ACAGTATCTC CATGGCAACA AGGAATTTT TCAGAGTGCT ATAAACTGG TGGATTTTCA   | 480 |
| AGATACAAGG CTCGAG   | 496 |

## (2) INFORMATION FOR SEQ ID NO:277:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

```

GAATTCGGCC AAAGAGGCCT ACACCCAGAG ACTGTAATTT GTGTAGTTTT TCTTTTTTAA      60
CTTAAAGACA ACTTTAAAAA ATACTTACAT TAATGTTTTT TATATTCATA GGTGGGTATA      120
TTCGCCTCAT TCAAATGGCA GTAGCCTTGG CTCACATAAG ACATGTTTCA TGTGATCTGT      180
ATCCTGGCAT ACCAGTTATA TTTTGTGGGG ACTTTAATAG TACACCATCA ACAGGAATGT      240
ATCATTTTGT CATCAATGGC AGCATTCCAG AGGATCATGA AGACTGGGCT TCCAATGGGG      300
AGGAGGAAAG ATGCAATATG TCTCTTACAC ATTCTTCAA GCTGAAAAAGT GCTTGTGGTG      360
AACCTGCTTA CACAAATTAT GTTGGTGGCT TTCATGGATG TCTAGATTAC ATTTTCATTG      420
ACTTAAATGC TTTAGAGGTT GAACAGGTGA TTCCATTACC TAGTCATGAA GAAGTTACCA      480
CTCCACTCGA G                                     491

```

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

```

GAATTCGGCC AAAGAGGCCT ACAGAGAACA GATAAAAATA AGCCTGTGGA ATGACCACTT      60
TGTGGAATAC GGCAGAACCG TGTGTATGTT TCGCACAGAG AAGATTCGGA AGCTCGTAGC      120
CATGGGCATC CCTGAATCTT TCGAGGGGAG ACTCTGGCCTT CTCTTCTCAG ATGCGGTGAC      180
GGATCTTGCC TCACACCCCTG GTTACTACGG GAATCTGGTG GAGGAGTCCC TGGGGAAATG      240
CTGCCTGGTA ACCGAGGAGA TAGAACGAGA CCTGCACCGC TCCCTGCCAG AGCACCCCGC      300
CTTCCAGAAC GAAACGGGAA TTGCTGCTTT GAGGAGAGTC TTGACGGCCT ATGCCCCACC      360
GAGCTCGAG                                     369

```

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

```

GAATTCGGCC AAAGAGGCCT ACTCTCCCTT TCCACTCCCT GGTGTTCCCA GGAGTGAGAT      60
GAGGGTGGAG GGGCCCAGCA CAGCACCTTC AACCTCAGGA TGAGAGAGGC CCTTTCACAA      120
AACTCTAAGG CAGGGGAACA GGAAACAGAG AAAGCCGGAG AACCCAGGA GGGCCCCAAG      180
AGCGGATTCT GGTGATTATT AATGTGCTTG CCCAATGAAG AAAGAATACT GGCACTCTCT      240
AGGTATGATG AGAGCAGACA GCAAACGTGG GGCCTGTCTA CAGTGATTCT CTACCCCAAT      300
GTATGGTCAT CCACGTTAGA AGCAGCAGTG AAAGGCGTGT TGCTTTTCAT TATTAACCTC      360
AAATCCCAGT CCCTAAACCA GCTCTTGACG CCCCTCTGTC AGGTGCTAAT CCTGGAAACT      420
GGAGGCCACC TGGTCTCCAC TTAGGTGAG GAAAACCTGG GAGAAGCCAT CAGACTGCAC      480
CTGTGGCATG AGATGCTTTG AGACAGGTCA AGAGGAGGAG CTCTCGAG      528

```

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

```
GAATTCGGCC AAAGAGGCCT ACAGTGTCGG AGTAGATTG AACTGGAGG TGAAGGTAGG      60
AGTAAGTGAT AGATTTTAGA ATTAGTGCTC AGAGCTGAAA TATCCAGTCC GTGAAGTTAG      120
AGGCCAGCCT TCATACCACT GTGATGACAG GAACTACCTT AATCTTTTCT GTCCTTTTCT      180
CTCTGCTGTC CCTCGGGCTG CCAGGCCAGC AGCAACACCC ACAGGTAATC TCCCCGCTGA      240
CTCCATCCAC TTGCTCTGCC CTCTGCCCTC TCTGTGCCCC GTTGACACCTG AGCGTACACC      300
CCAGCAGTGG CATCCAACCT GAG                                         323
```

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

```
GAATTCGGCC AAAGAGGCCT ACTCAGTCAG TACCATGCCA GTTACCTTTT TTCCTTGTA      60
CTTAATGAAT TGGATTTTCC TCAATCTGTT ATTTGTAGGA GGTTTGATG GGGCCAGGGT      120
AGATTTCCAG ATTTCTGCCT CAGAGGTAGT CTTTTCACA TATGACACCT GGGTGTGTTT      180
CTCTGTGTGG CCACAAGTCT TCTGCCTCTC TAAAAAATG TCTAGACCTT CTAGAAGGTC      240
TTTTGCCGCT AATTCTGAAC TTCCACTCC TTCCTTTGCA GCTGTGATTG GAGGGACATG      300
GCTCCAGCAT GCCAATGTAA ACCACCGCCC CCTCGAG                                         337
```

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

```
GAATTCGGCC AAAGAGGCCT AGGCTCTTCC ACTTAATTTT ATACTTTCAG GTCTGGATGC      60
CCATTTTAAT TCTTCTGAAA GCATGCCTCC TTCTGGCTTC AGGACTCCAT CTCAGCCTT      120
ATGATCTAAA AATAATGGAA AATTACCCGG TATCGTTAGA GCTACACCAA AATTGCATTG      180
AGCCAAAACCT CGAG                                         194
```

(2) INFORMATION FOR SEQ ID NO:283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

```

GAATTCGGCC AAAGAGGCCT AAAATCATCA TATTCATAGA GATATTAAAA GTGCAAATAT      60
CTTACTGGAT GAAGCTTTTA CTGCTAAAAAT ATCTGACTTT GGCCTTGAC GGGCTTCTGA      120
GAAGTTTTCG CCAGACAGTC ATGACTAGCA GAATTGTGGG AACAAACAGCT TATATGGCAC      180
CAGAAGCTTT GCGTGGAGAA ATAACACCCA AATCTGATAT TTACAGCTTT GGTGTGGTTT      240
TACTAGAAAT AATAACTGGA CTTCCAGCTG TGGATGAACA CCGTGAACCA CTCGAG      296

```

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

```

GAATTCGGCC AAAGAGGCCT AGCAACATCC ACGCAGCTGC TCATCAGGTA CGAGTGCTTC      60
CATATCCATT TACCCACCAT TGGCAATTG AAAGGACCAT CCAGACCCCC ATAGGATCCA      120
CATGGAACAC CCAGAGGGCT TTCCAAAAGC TGACTACTCC CAAGGTCGTC ACCAAGCCAG      180
GCCATATCAT TAACCCATA AAAGCAGAAG ACGTGGGCTA CCGGTCTTCC TCAAGGTCGG      240
ACCTGTCTGT CATAACAGAG AATCCAAAAC GAATCACCAC ACGTCACAAA AAACAGCTGA      300
AGAAATGCTC TGTAGATTGA GTTGCTGGAG GAGTGACAGC CAGGAGCCCT GACTTCACTT      360
CCTTTGGTCC AGTTTACTC TGATACAGGG TGGATTCCAA AACTGGCTCA GTACATTGCA      420
TGTAAGTAAG CCACATTTA AAAATAAAGG CTCGAG      456

```

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

```

GAATTCGGCC AAAGAGGCCT AAGGTCGGCC TGTTTCATCTT GATTAGCATC CAGGCCTTGG      60
AATATTTTCAT CAATGACAGC TTTATCTTTG ATATTCTTGA TGGTGTTTGC AAGCTCCTTT      120
GTAAGCAGCT GCTTCAGCTC ACCCCTCGAG      150

```

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

AATCCAAGCA ATAACCCAAG CAAACTTCA GATGCACCTT ATGATTCTGC AGATGACTGG 60  
TCTGAGCATA TTAGCTCTTC TGGGAAAAAG TACTACTACA ATTGTGCAAC TCGAG 115

## (2) INFORMATION FOR SEQ ID NO:287:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

GGAAGAAGAT GCTAGGAGAA GACTCAGATG AAGAAGAGGA AATGGATACC TCTGAAAGGA 60  
AGATAAATGC TGGTAGCCAA GATGATGAGA TGGGTTGCAC CTGGGGAATG GGAGAAGATG 120  
CAGTAGAGGA TGATGCTGAA GAGAACCCTA TTGTCTTAGA GTTTCAGCAG GAAAGGGAGG 180  
CCTTTTATAT AAAGGATCCC AAAAAGGCTC TCCAAGGCTT TTTTGACCGA GAAGGAGAAG 240  
AATTAGAATA TGAATTTGAT GAACAGGGAC AACTCGAG 278

## (2) INFORMATION FOR SEQ ID NO:288:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

GGATTTCTGA GGCCAAGTGC CCAATAGTTT CCAGTAGAAA CATGGCCATA CCAGTCTAGA 60  
ATTAAACCTT CTCATTTAAT CAATAGCACA ATCTAACCTA CACAAGAATA AGCAATCAAA 120  
CATCCAGTAT AACATGTTTT TCATTTTAC TTTCTTGGCG TCAATTTTTT TAATGATCTA 180  
TTTAAATTT TTTCAAAATG ACAACTACTA TGGAACTACTG AATACAAAGT TCAGTAACAC 240  
AACATTGATA ACAACAACAG CAGCAACAAT ACCACAACCA CCACCACTGA ATGGTCTGGG 300  
CACCTTCACA ATGGCTGTTG TACTTAGTTA CGAAGAAGAG TGGGGACAGA AAATGAAGCT 360  
CGAG

## (2) INFORMATION FOR SEQ ID NO:289:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

GACTCCATGC GTATGTCCCA CCTAAAGGTC GGCTCTGCTG CCGACATCCC CATCAACATC 60  
TCAGAGACGG ATCTCAGCCT GCTGACGGCC ACTGTGGTCC CGCCCTCGGG CCGGGAGGAG 120  
CCCTGTTTGC TGAAGCGGCT GCGTAATGGC CACGTGGGGA TTTCATTTCGT GCCCAAGGAG 180  
ACGGGGGAGC ACCTGGTGCA TGTGAAGAAA AATGGCCAGC ACGTGGCCAG CAGCCCCATC 240  
CCGGTGGTGA TCAGCCAGTC GGAAATTGGG GATGCCAGTC GTGTTGGGGT CTCTGGTCAG 300  
GGCCTTCACG AAGGCCACAC CTTTGAGCCT GCAGAGTTTA TCATTGATAC CCGCGATGCA 360

GGCTATGGTG GGCTCAGCCT GTCCATTGAG GGCCCCAGCA AGGTGGACAT CAACACAGAG 420  
GACCTGGAGG ACGGGACGTG CAGGGTCACC TACTGCCCA CAGAGCTCGA G 471

## (2) INFORMATION FOR SEQ ID NO:290:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

GAATTCGGCC TTCATGGCCT AGATTGAGTC ACATTGTTCT CTTTGATCCA TTTTCTTTTA 60  
GACAACATCA CTCAAACAAC CCTATTACTT CAGTAGCAAT GAACTGTCTC TGGATTTTAT 120  
TAAGCATCTC ACTGTTCTT TTTCTTCAGC TGTATGGCAC CCTGTCTTCC TGTACACCAG 180  
AGGCTCCTCA GCTGGGTAAG GTGAGCCAAC GTTACCAGGA GTATATGCTG AGAGGCCATT 240  
TCAAAGTCTT TCATAGAAGG CTGTGCTTGG GCAAACCTCGA G 281

## (2) INFORMATION FOR SEQ ID NO:291:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

GAAACTCTGC CCCTGAAGGT TTGTTTTCTA ATTCAGAGGT TTAAATTAAT CTAGCCCACT 60  
TAATAAAACC AGAGATCCTA TGGGAAATTT AGCCTAAGAC AGTGCTGGAA ATTGCCATAT 120  
GTTGATACAA AGAAGTGTTT GGCCACATTA CAGGTCTCAG ACTCAACTGC TATGTGTGAC 180  
TGCCGCTCTG TGCCTATGTC TTGCTTTTTT GCTGAGTTCC CTATTTCAT ATCTCCAGGT 240  
GATCCTCGAG 250

## (2) INFORMATION FOR SEQ ID NO:292:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

GAAATGTCAG AGGCACATAA GCTTTTACAA AAATTGTTGG TTCATTGTCA GAAACTGAAG 60  
AACACAGAAA TGGTGATCAG TGTCTACTG TCCGTGGCAG AGCTGTACTG GCGATCTTCC 120  
TCCCCTACCA TCGCGCTGCC CATGCTCCTG CAGGCTCTGG CCCTCTCCAA GGAGTACCGG 180  
TTACAGTACT TGGCCTCTGA AACAGTGCTG AACTTGGCTT TTGCGCAGCT CATTCTTGGA 240  
ATCCCAAGAC AGGCCCAACT CGAG 264

## (2) INFORMATION FOR SEQ ID NO:293:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 416 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

```
GAATTCGGCC CTTCATGGCC TAGGTTTCTC CGTGTGCTC AGGCTGGTCT CGAACTCCTG      60
ACCTCAGGTG ATCCACCTGC CTCAGCCTCC CAAAGTGCTG GGATTACAGG CATGAGCCAC      120
CATGTCCTGC TATAAATAAC TTTTAATAGG CTCTTTTCTT GGCTTTTTTT TTTAGTAACT      180
CAGCCCATT TCTTCTTCTC AATCTGGTCT TTGTAAATGT TGATAACGCT GTCTTACTTT      240
TAAATTGCCG TGATTAGAAA TTAGTAGAGA TATATAAACC TAGTCTTTTG GGGGATTTTG      300
AAAGGGTCAT AGTATTCTTA CTGTCTTCA AAATGTACCT TATATTTGAA CATTGGAAGA      360
TACGTGTTGC TGAATACAAG TTAGTTTCAT ACACACACAT ACACATGACA CTCGAG      416
```

(2) INFORMATION FOR SEQ ID NO:294:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 458 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

```
GAATTCGGCC TTCATGGCCT ACTCCATTCC CAGATAGAAA GCTTGAATGA AGAGTTGGTC      60
CAGCTGCTTC TCATCCGAGA TGAGCTGCAC ACAGAGCAGG ATGCCATGCT GGTGGACATT      120
GAAGACTTGA CCAGACATGC TGAAAGTCAG CAGAAGCACA TGGCAGAGAA AATGCCTGCA      180
AAGTGAAAAG AAGCCATTCA ACCAGAGAAC AAGCTAGAAT TTATTTTGCT TCTGTGGTTG      240
TAAAAATGCT GTTGCTAAAG GTGGCGCAGA AACAAATATC AGTGTAGTC ATTGATAATG      300
TCTGAAGCTT AATGTCCAGT GATTGGCCTT TGCTTCTTAA TTTATTTTAA TTTTACTT      360
GTGCCACTTA ATATCAGGCA TTTTAATAAA ATATTGTTAC AAAAAATGTA CAGTACTGAC      420
ACCACCACAA ATCATGGTTA ATAAAGAGA GTCTCGAG      458
```

(2) INFORMATION FOR SEQ ID NO:295:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 302 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

```
GTGTAAAACC AATGCCAGGA AAACCAAATA CACAAAACCC TCCACGGAGA GGTCTCTGTA      60
GCCAGAAATGG GTCTTTTGGC CCATCCCCTG TGAGTGGTGG AGAATGCTCC CCTCCATTGA      120
CAGTGGAGCC ACCCGTGAGA CCTCTCTCTG CTACTCTCAA TCGAAGAGAT ATGCCTAGAA      180
GTGAATTGG ATCAGTGGAC GGGCCTCTAC CTCATCCTCG ATGGTCAGCT GAGGCATCTG      240
GGAAACCCTC TCCTTCTGAT CCAGGATCTG GTACAGCTAC CATGATGAAC AGCAGTCTCG      300
AG      302
```

(2) INFORMATION FOR SEQ ID NO:296:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 412 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

```
CATGGATCTG CCTCCTGAGA GGGATGGAGA GAAGGGGAGG AGCACAAAGC CTGGCTTTGC      60
CATGCCAAAA CTTGCACTTC CCAAAATGAA GGCTTCTAAG AGTGGGGTCA GCCTGCCACA      120
GAGAGACGTG GATCCTTCCC TTTCTAGTGC CACAGCAGGG GGTAGCTTTC AAGACACAGA      180
AAAGGCCAGC AGTGACGGTG GTAGGGGAGG ACTTGGTGCA ACAGCAAGTG CCACAGGAAG      240
TGAGGGTGTG AACCTCCACC GGCCACAGGT CCACATTCCC AGTTTGGGCT TTGCCAAACC      300
TGATCTCAGA TCCTCCAAGG CCAAGGTGGA GGTGAGCCAG CCTGAAGCTG ACCTGCCTCT      360
TCCCAACAT  GATCTGTCTA CCGAAGGTGA CAGCAGAGGA TGTGGGCTCG AG              412
```

(2) INFORMATION FOR SEQ ID NO:297:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 308 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

```
GTGCTGGTGG CGCGGGGAGT GCGCGTCAAG GTGAACGAGG CCTACCGGTT CCGCGTGGCA      60
CTGCCTGCGT ACCCAGCGTC GCTCACCAGC GTCTCCCTGG CGCTGAGCGA GCTGCGCCCC      120
AACGACTCAG GTATCTATCG CTGTGAGTGC CAGCACGGCA TCGATGACAG CAGCGACGCT      180
GTGGAGGTCA AGGTCAAAGG GGTCGTCTTT CTCTACCGAG AGGGCTCTGC CCGCTATGCT      240
TTCTCCTTTT CTGGGGCCCA GGAGGCCTGT GCCCGCATTG GAGCCCATAT CGCCACCCCA      300
ATCTCGAG                                     308
```

(2) INFORMATION FOR SEQ ID NO:298:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 269 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

```
GAATAAGTAA ATTCATGGAA AGGAAGAAAT TAAAAGAAAG TGAGGAAAAG GAAGTGCTTC      60
TGAAAACAAA CCTTCTGGA CGGCAGAGCC CAAGTTTCAA GCTTTCCTG TCCAGTGGAA      120
CGAAGACTAA CCTCACCAGC CAGTCATCTA CAACAAATCT GCCTGGTTCT CCGGGATCAC      180
CTGGATCCCC AGGATCTCCA GGCTCTCTG GATCCGTACC TAAAAATACA TCTCAGACGG      240
CAGCTATTAC TACAAGGGA GGTCTCGAG                                     269
```

(2) INFORMATION FOR SEQ ID NO:299:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 458 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

```
GAGCGACCTT TGGAAATAGTT AAGCACAGGT CATTGTGGAC ATGAATTCAG GCCTCTGTAC      60
TAAAATCTAT TTCAGGGAAT GTTCTGTCTA GTGATTGCT CACCATTGA TATATAATGA      120
ATTATAGGAC AAGTATAAGC TGATCTGCTA TAGCTGTCCA TCAGAGAGAA TACACGTGGC      180
TATAACATCT ATAACAAAAC GACGATTCCT CTACAAGAGG CTGTTTCTCA CTGCTAACGT      240
TGGTGTTTCT GGCCTGGGAA GAAATGCACA GCGTGCATG GCATGCACGT TCAGACAGCT      300
GCATTGTAAG AGTTCTGTCA TGCAGTCTGA AAAGGGAAGA AACAGGATGG CTTTCTGTAG      360
CCACACCTGT GAGGCGTGAT GATTGTTGTA TTATTAGATT ACTGATTTT CTTTCTGAA      420
AATACATTG AGTTTAAATC ACATCTGTGG AACTCGAG                                458
```

(2) INFORMATION FOR SEQ ID NO:300:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 99 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

```
GGGATGCCTG TTCTTGGGGT AGAGAAGTCA GGTAGCCCAG GGCCCGCACT CTCAATAGAC      60
CTTCAGAGAA AAGGCATCGA GTTAAATGCC GCACTCGAG                                99
```

(2) INFORMATION FOR SEQ ID NO:301:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 569 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

```
GGTCTAACAG TAACACTACT CAAGAGACCC TGGAAATAAT GAAAGAATCA GAAAAAAAC      60
TGGTGGAAGA ATCTGTAAAC AAAACAAGT TTATATCTAA GACTCCAAGT AAGGAAGAAA      120
TTGAGAAAGA ATGTGAAGAT ACCAGTTTGC GTCAGGAGAC ACAGAGGCGG ACATCTAACC      180
ATGGTCATGC CAGGAAAAGA GCCAAGTCTA ATTCCAAGCT AAAGTTGGTG CGTAGCCTGG      240
CAGTGTGTGA GGAGTCCTCC ACCCCATTG CTGATGGGCC ATTAGAAACC CAGGATATAA      300
TTCAATTGCA CATCAGTTGC CCTTCTGACA AGGAGGAAGA AAAGTCCACA AAAGATGTCT      360
CTGAAAAGGA AGACAAGGAC AAAAACAAG AAAAGATCCC AAGGAAGATG CTGTCCAGAG      420
ACTCCAGCCA GGAATATACG GACTCCACTG GAATAGACCT ACATGAATTT CTTGTAAATA      480
CACTGAAAAA GAACCAAGG GACAGAATGA TGCTGCTAAA ATTAGAACAG GAGATTCTGG      540
AATTTATTAA TGACAACAAC CCACTCGAG                                569
```

(2) INFORMATION FOR SEQ ID NO:302:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

|   |     |
|---|-----|
| GCGATTGAAT TCTAGACCTG CCACCCAAAC CCAACTCTC AGACTTACCT CCCAAACCAC  | 60  |
| AGATGAAGGA CCTGCCCCC AAACCACAGC TGGGAGACCT GCTAGCAAAA TCCCAGACTG  | 120 |
| GAGATGTCTC ACCCAAGGCT CAGCAACCCT CTGAGGTCAC ACTGAAGTCA CACCCATTGG | 180 |
| ATCTATCCCC AAATGTGCAG TCCAGAGACG CCATCCAAAA GCAAGCATCT GAAGACTCCA | 240 |
| ACGACCTCAC GCCTACTCTG CCAGAGACGC CCGTACCACT GCCCAGAAAA ATCAATACGG | 300 |
| GGGCACTCGA G  | 311 |

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 683 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

|   |     |
|---|-----|
| ACAGCATGAA GGCAGAAGCC AATGCCCTGC ATCACAACA CGACAAGAGG AAGCGTCCGG  | 60  |
| GGAAGAATGC ACCCCAGGA GGTGATGAGC CACTGGCAGA GACAGAGAGT GAAAGCGAGG  | 120 |
| CAGAGCTGGC TGGCTTCTCC CCAGTGGTGG ATGTGAAGAA AACAGCATTG GCCTTGGCCA | 180 |
| TTACAGACTC AGAGCTGTCA GATGAGGAGG CTCTATCTT GGAGAGTGGT GGCTTCTCCG  | 240 |
| TATCCCGGGC CACAACCTCG CAGCTGACTG ATGTCTCCGA GGATTGGAC CAGCAGAGCC  | 300 |
| TGCCAAGTGA ACCAGAGGAG ACCTAAGCCG GGACCTAGGG GAGGGAGAGG AGGGAGAGCT | 360 |
| GGCCCTCCC CGAAGACCTA CTAGGCCGTC CTCAAGCTCT GTCAAGGCAA GCCCTGGACT  | 420 |
| CGGAGGAAGA GGAAGAGGAT GTGGCAGCTA AGGAAACCTT GTTGGCGCTC TCATCCCCC  | 480 |
| TCCACTTTGT GAACACGCAC TTCAATGGGG CAGGGTCCCC CCCAGATGGA GTGAAATGCT | 540 |
| CCCTTGGAGG ACCAGTGGAG ACACTGAGCC CCGAGACAGT GAGTGGTGGC CTCAGTCTC  | 600 |
| TGCCCCGCAC CCTGTACCT CCACTTTGCC TTGTTGGAAG TGACCCAGCC CCCTCCCCTT  | 660 |
| CCATTCTCCC ACCTGATCTC GAG   | 683 |

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 653 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGAGATGTCT ACTCTCAGCT CACGCCTGTA ATCCCAGCAT | 60  |
| TGTGGGGAGG TCAAGTTGGG TGGATTGCTT GAGCCCAGGA GTTTGAGACC AGCCTAAGCA | 120 |
| ATAGGCAAAA CCTGTCTCT ACAAAAATCA GCCAGGTATG GTAGTGTGTA CCTGTAGTCC  | 180 |
| TAGCTACTCA GGAGGCTGAG GTGGGAGGAT CGCTTGAGCC TGGGAGGTGA AGGCTGAAAT | 240 |
| TAGCCATGAT CATGCCACTG CACCCCAAGC CTGGGCAACA GAGCAAGACC TTGTCTCAAA | 300 |
| AAAAAAGGA TGAGCTAGGT TTGTATCTGT AGACAGAGAT TTATGATTAA TTGGTAGGTG  | 360 |
| AAAAAGTGTA TTAAAGTACA GTTATAGATT AGAGTACAAA ATGAATGAGT ATATATGCGT | 420 |

```

TTAAAAGTAT GTATACATAT CAGGAAAGGT TACATGAGGA TTTTCACTTT CCACTTTATA      480
TCTCCAGTA TTTGAATTTT TAATAACAAT CTTTTTATCA TAAACTATA TTAAATTAAA      540
CTTTAGATT TTTTAGTGGT ATAAGTAGAA CAGGAACCCT AATACATTGT TTTCTACTTT      600
TGTGATAAAG ATAATTCATG ATAGATGAAG TTGCAAACCG AAAGATCCTC GAG          653

```

## (2) INFORMATION FOR SEQ ID NO:305:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 442 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

```

GAATTCGGCC TTCATGGCCT AAGGTATTCC AAAATGTCTA ATTTATTTTA TCCGATGGTA      60
AATGTAATAA TTAAAGAAAG AGGAAAGAAT CATGAAAGGT GGCCCTTAAA GAGGGCTTCT      120
GGCAGAGTTA GGTGAGAGGC ACACCTTCTT ACAGACTAAG AGTTTTTAAG TACTCAAGGT      180
GATGTTTATC AGAAGCTTGG ACTGCTTCTG TGTCTTTTFA TTGTGCTTAT CTGGGAGGGA      240
GAGTTCCTGT TCTGCTCCTA TACATCTTTC TGCAGCTGCA GACATACTCC CTGAGTCTGC      300
TTTTCAGCTT CCTATCTTAG TGCACCTGAA GGGAAAGGAA TGAGCTTATT AAGGCCCACT      360
GTTTACTTGG GGCCCATTTG ATGAGAGTGA AGTTTGGCAG TTACCCAAGA GACGTTCCCC      420
TCACCTCCCT CCGGCGCTCG AG          442

```

## (2) INFORMATION FOR SEQ ID NO:306:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 412 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

```

GAATTCGGCC TTCATGGCCT ACCAATATGC AAATCAGTAC CTCTTCTCTT AGAGGTGTTT      60
ATGCCCAAGC TCCTCAGACA AGTCCATCCC ACTGTGTGGG AGGAAGTTGA AGGGTGAGGA      120
TTTTAAGAT TTTTATCTTG CTGGAAGTTG TGAAGACTCA ATGACAAATG GCTAGGTTTT      180
GAAGGGGTCT TGAAGTCAT TACTGGGGAT AGACCCCTCT TGATACTTGT CACATTAATA      240
TCTGCCCAGA CTCTCACACA TTCAGATGTT TAACGTCACA TGCATTAAGT TCTTTTGGTT      300
GCATGAGACA GTGATGCACA GAACTCACT TAGGAAAGGA GATAGGTGGC AATAAAGAAA      360
ACAGGGATTT CATAGGAATG CAGTAAAAAA AAAACCATGG CCTAATCTCG AG          412

```

## (2) INFORMATION FOR SEQ ID NO:307:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 239 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

```

GGGGTTGTCT GAGGCCCAAG GGTGCTATAA GGGCCGCTCT ACGGTGTCCT GGGGCCCGGG      60

```

CTTGGCCCTT GTTGAGAG GGTGAGGAG CCGGGCTGGG CCCTGCGCAC CTCCCGGGGG 120  
 AGCTCGCCCT GCTTGGCCAG CTCTCCCAT AGCTGCTCCT TCCGCTGAG CTCTTGGCG 180  
 TTGGGGACCT GGTGGGCGAG GACGTCTTG GGGGAGGGA CTTTGGATGT GTTCTCGAG 239

## (2) INFORMATION FOR SEQ ID NO:308:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

GCGCACCATC CTGGGAAGTG CATGTCTCAG ACCAACTCCA CCTTACCTT CACCACCTGT 60  
 CGCATCCTGC ATCCTTCAGA TGAGTCACT CCGGTACAC CAAGCCTTAA CTCAGCCCCA 120  
 ACTCCAGCTT GTGGCAGCAC CAGCCACTTG AAATCCACGC CGGTGGCCAC ACCATGCACT 180  
 CCACGGAGAC TGAGCCTGGC TGAGTCCTT ACTAACACCC GTGAGTCCAC GACCACCATG 240  
 AGCACATCCC TGGGGCTCGT GTGGCTGTTG AAGGAGCGGG GCATTCTGC TGCCGTGTAC 300  
 GACCCCCAGA GCTGGGACAG GGCCGGCCGG GGCTCCCTCC TGCACCTCTA CAGCCCCAAG 360  
 ATGGCTGTGA TCCCTCTAC TCCGCCGAAC TCGCCTATGC AGACACCCAC ATCCTCCCCA 420  
 CCCTCCTTGT AGTTCAAGTG CAGGAGCCCT CCTACGACA ATTCCTGGC TTCCAAGCCA 480  
 GCCAGCTCCA TCCTGAGGGA AGTGAGAGAA AAGAACGTCC GCAGGACCTC GAG 533

## (2) INFORMATION FOR SEQ ID NO:309:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

GAATTCGGCC AAAGAGGCCT ACCCTAAAAC ATTTATTTCA AGGAGAAAAG AAAAAGGGGG 60  
 GCGCAAAAA TGGCTGGGCG AATTATAGAA AACATGAGCA CCAAGAAGCT GTGCATTGTT 120  
 GGTGGGATTC TGCTCGTGT CCAAATCATC GCCTTCTGG TGGGAGGCTT GATTGCTCCA 180  
 GGGCCACAA CGGCAGTGT CTACATGTC GTGAAATGTG TGGATGCCG TAAGAACCAT 240  
 CACAAGACAA AATGGTTCGT GCCTTGGGGA CCCAATCATT GTGGCAAGAT CCTCGAG 297

## (2) INFORMATION FOR SEQ ID NO:310:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

GAATTCGGCC AAAGAGGCCT AGGGTTTAAG AGCTGTGGAG GACTGAAAAC TGGATAAAAA 60  
 GGGGGTCTTT TTCCTTGCCC CTGTCTCTCA CTCAGATGCG CTCTTTTTC GCCACTGTTT 120  
 GGCAAGTTT TCTGTTAAGC CCCAGTTCT CCAGGTGCGT TACTATTCT GGGATCATGG 180

GGTCAGTTTT AGGACACTTG AACACTTCTT TTCCCCCCTC CCCAGTTCTC CAGGTGCGTT 240  
ACCTCGAG 248

## (2) INFORMATION FOR SEQ ID NO:311:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

GAATTCGGCC AAAGAGGCCT AGGTAAATAA CTAATATTGA TGTATTTTAA TATTTTAATA 60  
TAGACTAGTA AACTATGCAG AGTTAAGTGT TACATTAGAA TCTTGAACCT TCCTAACATT 120  
TCTCTTCCTC AGTTTCCTAT TGTTTGGTA GAGTATGTAG ACATTGCGA GATTAATTTA 180  
GAGTTGGTAG ATACATTCTG GATTTTCATT TACTTTAGAT AGCAGGTTTG GCACCTTTAAA 240  
TATATTTAAT TCAGTAAGAG AATAACTGAG TATGAGCTGT ATCCTCATCT TACTGTTGAA 300  
GACATCCCAA ATAGTTGGGT GTGCACTGTG GCGGGATCTC GAG 343

## (2) INFORMATION FOR SEQ ID NO:312:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

GAATTCGGCC AAAGAGGCCT ACGGGGAGGC GCGCCCGCGC TGAGTCGGCG GCGGGTAGCC 60  
ACTCCATGCC CTTGTCCGAT GGTTCGCAAC TCCGATTTTG CACACCGCTC CACCGTGCCC 120  
CCCAGCGCAC ACCCATTCAC ACTCACGCCA ACACCTCTCG TGAACACTTT TATAATTGTT 180  
AGGCGTGGCC GTTGGGACTT TGGGCGCAGC GCGGCTGATA CTGCGTCTGG AGGATTGATA 240  
TTTACTTTTG CATTGCGGTT ACCTCGAG 268

## (2) INFORMATION FOR SEQ ID NO:313:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

GTCTCTCGCC GCCGGAGGAA GATGANGCTG AAGATTGGAT TCATCTTACG CAGTTTGCTG 60  
GTGGTGGGAA GCTTCCTGGG GCTAGTGGTC CTCTGGTCTT CCCTGACCCC GCGGCCGGAC 120  
GACCCAAGCC CGCTGAGCAG GATGAGGGAA GACAGAGATG TCAATGACCC CATGCCCAAC 180  
CGAGGCGGCA ATGGACTAGC TCCTGGGGAG GACAGATTCA AACCTGTGGT ACCATGGCCT 240  
CATGTTGAAG GAGTAGAAGT GGACTTAGAG TCTATTAGAA GAATAAACAA GGCCAAAAAT 300  
GAACAAGAGC ACCATGCTGG AGGAGATTCC CAGAAAGATA TCATACTTCT CGAG 354

## (2) INFORMATION FOR SEQ ID NO:314:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCGGCC AAAGAGGCCT AGTGCAAGAA CATGAAGCAC CTGTGGTTTT TCCTCCTGCT      60
GGTGGCAGCT CCCAGATGTG TCCTGTCCCA GGTGCACCTG CAGGAATCGG GCCCGGGACT      120
GTTGAAACCT TCGGACACCC TGTCCCTCAC CTGCTTTGTC TCGGGTTACT CCCTCAGTAG      180
TGTTCACAT TGGGGCTGGA TCCGCCAGTC CCCAGGGAAA GGACTGGAGT GGATTGGGAA      240
CATCCATCAC AATGGTAGAA CCAATTACAA CCCGTCCCTC GCCAGCCGCG GTTCCATCTC      300
AGCCGACACG TCCAAAGAACT CCCTCTCCCT GAATCTGACC TCTGTGACCG CCGCAGACTC      360
GGCCGTCTAT TTCTGTGCGA GCGGCCCTAT TGCCTCCTTT GAATCGACGA CTCTAAAGGT      420
GGGCGGAGAC TTTCATCTCT GGGGCCAGGG AATCCTGGTC ACCGTCTCCT CAGCATCCCC      480
GACCAGCCCC AAGGTCTTCC CGCACAGCCT CGAG                                     514

```

## (2) INFORMATION FOR SEQ ID NO:315:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

```

GAATTCGGCC AAAGAGGCCT AGGACACTAG AATTATTAGT GTTCATTTTC ATCTAAGATC      60
TTTATCTCT AACGTTCTTG GTCCATTTGA AACATTGCAG TATGCAAAAC TACTGCAATG      120
TTAAACCCAA GAGAAAAGCC ATTATCATGT GTATGCTGGT CATCATGATC AGTGTGGTAC      180
AATTTTAA AATAACTAT CATGCCCTTC TCGAG                                     215

```

## (2) INFORMATION FOR SEQ ID NO:316:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 788 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

```

GAATTATGTA CGCCCTCTTC CTCCTGGCCA GCCTCCTGGG CGCGGCTCTA GCCGGCCCGG      60
TCCTTGGACT GAAAGAATGC ACCAGGGGCT CGGCAGTGTG GTGCCAGAAT GTGAAGACGG      120
CGTCCGACTG CGGGGCAGTG AAGCACTGCC TGCAGACCGT TTGGAACAAG CCAACAGTGA      180
AATCCCTTCC CTGCGACATA TGCAAAGACG TTGTCACCGC AGCTGGTGAT ATGCTGAAGG      240
ACAATGCCAC TGAGGAGGAG ATCCTTGTTT ACTTGGAGAA GACCTGTGAC TGGCTTCCGA      300
AACCGAACAT GTCTGCTTCA TGCAAGGAGA TAGTGGACTC CTACCTCCCT GTCATCCTGG      360
ACATCATTAA AGGAGAAATG AGCCGTCTCG GGGAGGTGTG CTCTGCTCTC AACCTCTGCG      420
AGTCTCTCCA GAAGCACCTA GCAGAGCTGA ATCACCAGAA GCAGCTGGAG TCCAATAAGA      480

```

```

TCCCAGAGCT GGACATGACT GAGGTGGTGG CCCCCTTCAT GGCCAACATC CCTCTCTCC 540
TCTACCTCA GGACGGCCCC CGCAGCAAGC CCCAGCCAAA GGATAATGGG GACGTTTGCC 600
AGGACTGCAT TCAGATGGTG ACTGACATCC AGACTGCTGT ACGGACCAAC TCCACCTTTG 660
TCCAGGCCTT GGTGGAACAT GTCAAGGAGG AGTGTGACCG CCTGGGCCCT GGCATGGCCG 720
ACATATGCAA GAATATATC AGCCAGTATT CTGAAATTGC TATCCAGATG ATGATGCACA 780
TGCTCGAG 788

```

## (2) INFORMATION FOR SEQ ID NO:317:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 214 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

```

GAATTCGGCC AAAGAGGCCT AAATCATCCT GATGATGGTT TTCTTACATA AACATGAGCT 60
TCTGACCATG TACCATGGAT GGGTTCTCAC TTCCTGCTAT ATCCTGATCA TCACTATTGC 120
AAATATTGCA AATTGGCCA GTACTGCTAC TGCAATCACA ATCCAAAGGG ATTGGATTGT 180
TGTTGTTGCA GGAGAAGACA GAAGCAAAC CTGAG 214

```

## (2) INFORMATION FOR SEQ ID NO:318:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

```

GTTGTCTTTT TTCCCCTTTA TAGCTGCTGG AGTGAATTTT AGAAAGCCTA AGTCATACAT 60
CACATTGCTT CATGGGCATC CCAGTACACT TTGGATTTTA TTTTACATCC TTA CTGATCT 120
GATTCTCATC TCTGTCTCTT CATGGTTCTC TGCCTTCTAG TTACACTGGT GACCTTTCAA 180
AACCTTTACC ACATTGAGTT CATTCCTTAC TTTTCACTCT TTCTCTGCCT GGAGTGTCTT 240
GCCCCATCTT TACGTGGCAC GCTCGAG 267

```

## (2) INFORMATION FOR SEQ ID NO:319:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

```

GAAGCTTTCA GGCTATCTTC TAGTCAAGAT GAGTGATAAG CCAGACTTGT CGGAAGTGGA 60
GAAGTTTGAC AGGTCAAAAC TGAAGAAAAC TAATACTGAA GAAAAAAAT ACTCTTCCCT 120
CAAAGGAAAC TATCCAGCAA GAGAAAGAGT GTGTTCAAAC ATCATAAAAT GGGGATCGCC 180
TCCCAACAGC AGATTTCGAC ATTACCTGAG AGTCTTGATT TTAGGCTTGT TTTTGTAA 240
CCCATGTGTT CTCGAG 256

```

## (2) INFORMATION FOR SEQ ID NO:320:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

```

GCTGCGTGTG ATGGAGACCA AACCCGACAA GGCAGTGTCC ATCATTGAGT GTGACATGAA      60
CGTGGACTTT GATGCTCCCC TGGGCTACAA AGAACCCGAA AGACAAGTCC AGCATGAGGA      120
GTCGACAGAA GGTGAAGCCG ACCACAGTGG CTATGCTGGA GAGCTGGGCT TCCGCGCTTT      180
CTCTGGATCT GGCAATAGAC TGGATGGAAA GAAGAAAGGG GTAGAGCCCA GCCCCTCCCC      240
AATCAAGCCT GGAGATATTA AAAGAGGAAT TCCCAATTAT GAATTTAAAC TTGGCGCGCT      300
CGAG                                         304

```

## (2) INFORMATION FOR SEQ ID NO:321:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

```

GAATTCGGCC AAAGAGGCCT ACTCTTACAC CTTCCGCTCC GTGGGCACCT TCAATATCAT      60
CGTCACGGCT GAGAACGAGG TGGGCTCCGC CCAGGACAGC ATCTTCGTCT ATGTCCTGCA      120
GCTCATAGAG GGGCTGCAGG TGGTGGGCGG TGGCCGCTAC TTCCCCACCA ACCACACGGT      180
ACAGCTGCAG GCCGTGGTTA GGGATGGCAC CAACGTCTCC TACAGCTGGA CTGCCTGGAG      240
GGACAGGGGC CCGGCCCTGG CCGGCAGCGG CAAAGGCTTC TCGCTACCG TGCTCGAG      298

```

## (2) INFORMATION FOR SEQ ID NO:322:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

```

GCGCCGTGTC CTTTTCGCTT GGTACCAGCG GCGACATGAC GGGGTACACT CCGGATGAGA      60
AACTGCGGCT GCAGCAGCTG CGAGAGCTGA GAAGGCGATG GCTGAAGGAC CAGGAGCTGA      120
GCCCTCGGGA GCCGGTGCTG CCCCACAGA AGATGGGGCC TATGGAGAAA TTCTGGAATA      180
AATTTTGGGA GAATAAATCC CCTTGGAGGA AAATGGTCCA TGGGGTATAC AAAAAGAGTA      240
TCTTTGTTTT CACTCATGTA CTTGTACCTG TCTGGATTAT TCATTATTAC ATGAAGTATC      300
ATGTTTCTGA AAAACTCGAG                                         320

```

## (2) INFORMATION FOR SEQ ID NO:323:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

```
GCAAAATCT CAGGCCCCAG AAAAGCCTCT TGTCACTCT CAGATGGGTT CCAAAAAGAA      60
GCCCAAAATT ATCCAGCAAA ACAAAAAGA GACCTCGCCT CAAGTGAAGG GAGAGGAGAT      120
GCCGGCAGGA AAAGACCAGG AGGCCAGCAG GGGCTCTGTT CCTTCAGGTT CCAAGATGGA      180
CAGGAGGGCG CCAGTACCTC GCACCAAGGC CAGTGGAAAC GAGCACAATA AGAAAGGAAC      240
CAAGGAAAGG ACAAATGGTG ATATTGTTCC AGAACGAGGG GACATCGAGC ATAAGAAGGA      300
ACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```
GCACTTCTGA GAGGATGCTG GGAATCTGCA GGGGGAGACG GAAATTCCTG GCTGCCTCGT      60
TGAGTCTTCT CTGCATCCCA GCCATCACCT GGATTACCT GTTTTCGGG AGCTTCGAAG      120
ATGGAAGGCC CGTGTCTCTG TCACCGCTGG AGTCCCAGGC ACACAGCCCC AGGTACACGG      180
CCTCCAGCCA GCGGGAGCGC GAGAGCCTGG AGGTGCGCAT GCGCGAGGTG GAGGAGGAGA      240
ACCGCGCCT CCGCAGGCAG CTCAGCCTGG CCCAGGGCCG AGCCCCACCC ATCCTCGAG      299
```

(2) INFORMATION FOR SEQ ID NO:325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

```
GAATTCGGCC TTCATGGCCT ACTCCAACT CATGCCCTTG TTTTATCTC TGCCCTTGGA      60
TGGCTGTCTT CTATTTTCAC TCACAATTC AACACATTT GACTTGCTCG TGTCACCTAG      120
GGTTCCGCC TCAGGTATGT CTCTTCCTT AATTCTTTG CCGTCTTTG TGCTGTTGAC      180
CTCACCTTT CTGGGTCTT CCTATTGGTC TCAGCTTCAG GTTTCAGCC GCCCTGGTT      240
TCCTGAACAT TCCTTCTGTG GGTCTTCCC CTCCTTCTCA CCCACCTCG AG      292
```

(2) INFORMATION FOR SEQ ID NO:326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

```

GAATTCGGCC TTCAGACTTG AAGTGGAGAA GGCTACGATT TTTTGTATGT CATTTTGTGT      60
AAGGGCGCAG ACTGCTGCGA ACAGAGTGGT GATAGCGCCT AAGCATAGTG TTAGAGTTTG      120
GATTAGTGGG CTATTTTCTG CTAGGGGGTG GAAGCGGATG AGTAAGAAGA TTCCTGCTAC      180
AACTATAGTG CTTGAGTGGA GTAGGGCTGA GACTGGGGTG GGGCCTTCTA TGGCTGAGGG      240
GAGTCAGGGG TGGAGACCTA ATTGGGCTGA TTTGCCCTGCT GCTGCTAGGA GGAGGCCTAG      300
TAGTGGGGTG AGGCTTGGAT TAGCGTTTAG AAGGGCAAAC TCGAG                      345

```

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

```

GAATTCGGCC TTCATGNCCT ACCTTTCGGT CCGTTCCTTC ACGCCTTCCT CTCATTTC      60
CTTCCTTCTA TTTTCCCTTC CCTCTTTCG CTTCCTGCGC CCGTTTCCTT CCTCCCTCCC      120
TTCCTCCTTC CTTCCTTCCT CTGCGTTCTT CCTCTCTCCT TTGTTCCCTC CTCCTCCTCC      180
CCACTCCCTT TTCTCTCCTT CTTCCACCC CAGTCTCCTA CTCCCAGTC CTCCTATCCC      240
CATGGAACAT ACACCTGCTT TGTCTGGGAG CCACGTTAT CTGCCAGCC AGACCCTGGC      300
CAGGAGGATC AGGGTCACGG TCAGCTTGGG CCGAGAACCC TTCACATGAG ACAAGCTCCT      360
CTGCCAGGGT TTCCTGTGGG AAAGGCCCCA CTTCCCGACC CTCCTGGGCC ACTGCATGGG      420
GTCCCTCTCT CGGCTTCTTC TCCCTCTCC ACCCGGCAGC CCCCCAGCT CGAG                      474

```

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

```

GAATTCGGCC AAAGAGGCCT AATTACTCC CCAATATAAA ACATTTTACC TGCATCTAT      60
GTGTACATAT TGAATGATGT GTAACAATAT CATAATTTT ATGTTCTGCA TTTTTCCTACT      120
TATATATCTT TATTAAATG GACTTAACTT TACTAATGGA GTAATTTTGA GCTTTCAGAA      180
GGAGTTCTCA CTCGAAGATA AAGAACAGCT CGCTAACCCAC GAAAGAGGAA TCGATGCTCA      240
GCTTTTAGTT GCACTTCCTA AAGTTGCAGA ATTAAGACAA ATCTTTGAAC CAAAGAAGAA      300
AGAATTCTTA GAAATGAAAA GAAAAGAAAG AATTGCCAGG CGCCTGGAAG GGATTGAAAA      360
TGACACTCAG CCCATCCTCT TGCAGAGCTG CACAGGATTG GTGACTCACC GCCTGCTGGA      420
GGAAGACACC CCTCGATACA TGAGAGCCAG CGACCCGACC AGCCCCCACA TCGGCCGATC      480
AAATGAAGAG GAGGAACTT CTGATTCTTC TCTAGAAAAG CAAACTCGAT CCAAATACTG      540
CACAGAAACC CTCGAG                      556

```

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACAAAACCAT | CCATAAATAA | ACAAAGCTAA | GAAAGCTAAG | 60  |
| AAACAAAGCT | AAGAAACAAA | GACTGAGGTG | AGGGAGATTT | GAGTATTTT  | TTTTCCTCTA | 120 |
| CCAACAAGTG | AAGAATTGAA | CACCTTAATC | CATCTGATCT | CCCAGGTGGA | AGCCACAAAT | 180 |
| CTTTTTTTT  | GTTTTGCTCA | GCATATTGGC | ACAGTGAGAA | ATTCATTTA  | TACTCTCTGG | 240 |
| CATCTCTCTT | GTAAACTCAC | CAAGTCTCAA | TAAGTTCACA | AAGAAGGCAG | AGACAAATAA | 300 |
| CCCTAGAATG | CAGGTGATTG | TTTATTATG  | TATTTTCCTT | GTTACATACC | CACCTATACC | 360 |
| CAAGGCCTTT | GCAGAAAAGC | TCGAG      |            |            |            | 385 |

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 696 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGGAAGCAGG | AGTTTATTTT | TATCCTTTTG | TAAGTATTAA | 60  |
| CTCGGTAATC | ACAACAAACA | CGGAGCAATC | TCAATGCTGT | TTATCCGGAG | GACAGTCTGC | 120 |
| GGGGTCGTGA | CGATTCTTTT | CTTCTGAAG  | TTTTTCCTTT | TCCTGAATCT | CATAATGATT | 180 |
| CTTGGCCATG | ATTCTGTCTT | TTCAATGACT | GTGGCTTCTA | CTCGAACAG  | ATCCTTTCCG | 240 |
| AGGAGTGGCT | TGCCAAGCAG | CGTGAAGTTG | TCTGCCCCAA | CCAGCAGGAC | CTTCTCCAGT | 300 |
| CGAATTCTCT | CTCCACACGC | AAGGTCTAGT | TCATTTCCAA | TAAAGATCAG | GTCTTCAGAG | 360 |
| GTCACCTTCC | ACTGGCGGCT | GGCAAAGTGC | ACCACGGCAA | AGAGCCTGCC | ATACTGCCCC | 420 |
| GTGACGATCA | TCTCATTTC  | TTTCTTCACG | ACCTCTGCAT | GGTGTCTGGT | CTCCTCAACT | 480 |
| GGGTCTGGCA | GAACAACTTC | TGGCCAAGGT | GGTGAATCA  | GGGATGTTT  | AGGAACATAT | 540 |
| CCTGGTAGAT | ATGAAGTGCT | CTGTGAATTG | AACCTTCGAG | AAGCAGACCA | AAGGGAGGCT | 600 |
| GCTCCGGGCC | CCGAAGGTCT | CAGGATGCTG | TGGCTGCACG | CGGACGCCAG | CCGCCCTAAG | 660 |
| GTGACCGTCA | GGGAAGATGC | TGCCATGGCC | GCCGCC     |            |            | 696 |

(2) INFORMATION FOR SEQ ID NO:331:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AATTTTTTGT | ACATCTGGGC | CCTTAGTTTT | TATTCTGTTT | 60  |
| ATTATATGTC | TCTGTCTCTC | TCTATTGTGT | GTGTGTGTGT | GTGTGTGTGT | GTGTGTGTGT | 120 |
| GTGTGTGTGT | GTGGTGCAGG | AGTGCCACCC | CCAGGGCCCT | GTCAACCTCT | CTTTTCTCCT | 180 |
| CCATGGCTGT | CTGCCTGCGT | ATCTGTCTCT | GAGAATCCTC | GGGGCGGTCA | GGGGATGTCA | 240 |
| GGAGGGGAAG | GAGCCGCCCT | CCCTATCTTG | CTGCTCCTCT | TGGCACTCAG | GGGCACCTTC | 300 |
| CATGGAGCCA | GACCGGTG   | AGGGGCTTCT | GGGATTGGT  | GTCTGTGCT  | GCCAGAGCAG | 360 |

GAACCCCGAG TACTCGAG

378

## (2) INFORMATION FOR SEQ ID NO:332:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACATTGGGAT | TATTGGTGCT | GTGACCATGG | CTGGCATCAT | 60  |
| GGCGGCAGAC | AGAAGTGAAT | CACCTAGTTT | GACCCAAGAG | AGAGCCAACC | TGAGCGATGA | 120 |
| GCAGTGCACA | CAGGTGACCT | CCTTGTTGCA | GTTGGTTCAT | TCCTGCAGTG | AGCAGTCTCC | 180 |
| TCAGGCCTCT | GCACTTACT  | ATGATGAATT | TGCCAACCTG | ATCCAACATG | AAAAGCTGGA | 240 |
| TCCAAAAGCC | CTGGAATGGG | TTGGGCATAC | CATCTGTAAT | GATTTCCAGG | ATGCCTTCGT | 300 |
| AGTGGACTCC | TGTGTTGTTT | CGGAAGGTGA | CTTCCATT   | CCTGTGAAAG | CACTGTACGG | 360 |
| ACTGGAAGAA | TACGACACTC | AGGATGGACT | CGAG       |            |            | 394 |

## (2) INFORMATION FOR SEQ ID NO:333:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 547 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

|            |            |            |             |            |            |     |
|------------|------------|------------|-------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACTTATTTTC | CTGTGAAAT   | GCCTACCACA | AAGAAGACAT | 60  |
| TGATGTTCTT | ATCAAGCTTT | TTCACCAGCC | TTGGGTCCTT  | CATTGTAATT | TGCTCTATTC | 120 |
| TTGGGACACA | AGCATGGATC | ACCAGTACAA | TTGCTGTTAG  | AGACTCTGCT | TCAAATGGGA | 180 |
| GCATTTTCAT | CACCTACGGA | CTTTTTCGTG | GGGAGAGTAG  | TGAAGAATTG | AGTCACGGAC | 240 |
| TTGCAGAACC | AAAGAAAAAG | TTTGCACTTT | TAGAGATACT  | GAATAATTCT | TCCCAAAAAA | 300 |
| ACTCTGCATT | CGGTGACTAT | CCTGTTCTCG | GTCCTGAGTT  | TGATCACGTC | GCTGCTGAGC | 360 |
| TCTGGGTTTA | CCTTCTACAA | CAGCATCAGC | AACCCCTTACC | AGACATTCTT | GGGGCCGACG | 420 |
| GGGGTGTACA | CCTGGAACGG | GCTCGGTGCA | TCCTTCGTTT  | TTGTGACCAT | GATACTGTTT | 480 |
| GTGGCGAACA | CGCAGTCCAA | CCAACCTCTC | GAAGAGTTGT  | TCCAAATGCT | TTACCCGACT | 540 |
| CCTCGAG    |            |            |             |            |            | 547 |

## (2) INFORMATION FOR SEQ ID NO:334:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGGGAAATT | GAGTCAAGAA | AAGGTTCAAT | ATTTTTTAAT | 60  |
| GGTAGAATTG | ACCGTATGTG | TATGTGCTTC | TAGAAGTGAT | TCAGGAGAGA | GGGTGGAATG | 120 |

```

GATGGTGTGG GACGGAGGGA AGAATTGGTG GAATGATGTT GGCAAAAAGG AATAGGCTTT      180
TGTGCATAAG TTGAGGGATT GGCCCTGCCT AGAAACATGG ACAATTCGTC TATAGTAAGA      240
AGAGAAAAGG TAGATCTATG ACCACAGACA TAGTCAGATA ATCATTTTAA AATTCTTTAA      300
TCAATAGATG TTTCTGATGT ATGGCAGGCA GTAAGCTAAG CAGTTACAT ACCTGATTTT      360
ATTTAGTTAT TATAACAATC CCAGTCTAAA ACTCGAG                                  397

```

## (2) INFORMATION FOR SEQ ID NO:335:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 313 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

```

GAATTCGGCC TTCATGGCCT ACTCCATCCT TAAGGTCACC ATTGGTATGT TCCTGCTCTC      60
TGGAGATCCC TGCTTCAAGA CGCCACCATC GACTGCCAAG TCCATCTCCA TCCCAGGCCA      120
GGATTCCCTCC CTGCAGCTGA CGTGTAAAGG TGGTGGGACC AGCAGTGGGG GCAGCAGCAC      180
CAACTCCCTG ACTGGGTCCC GGCCCCCAA GGCTCGGCCC ACTATTCTCA GCTCAGGGCT      240
GCCAGAGGAA CCCGACCAGA ACCTGTCCAG CCCTGAGGAG GTGTTCCACT CTGGCCACTC      300
CTCGCAACTC GAG                                  313

```

## (2) INFORMATION FOR SEQ ID NO:336:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 467 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

```

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGCCTCC CAAAGTGCTG      60
GGATTACAGG CTTGAGCCAC CACACCTGGC CTAGTGATT GTAAATTCAT GAGCTGTTGC      120
TGTATTGCCT TCCACAGACA GTCAATTTAT AATCCCTCAG TATTATATA TCAGGAAGAT      180
TCAGTGAATG GAATTTTGGG TTGGTGGAGG ACATATTTTT TAATTGGTAG ACCACTGAGT      240
GCTTTTGCAA ATCTCCTTAA ATCACATTAC AGCAGGAACA ACTATAGAAA ATACAATTAT      300
TTAGGAGCAA CCTGATCTGT GAGCTAATTT AATGAGTGGA GCCCAGCCTA CATGCTGAAG      360
AGCTCACATG CCTCCTACCT AGTTCCTTAA CTAGGTTTTC ACTCATGCCC ATTTTGTCTAT      420
ACTCTTGAAA CCTTCTATC TTTGCATAGA ACATTATTCT TTCCACT                      467

```

## (2) INFORMATION FOR SEQ ID NO:337:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 348 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

```

GAATTCGGCC AAAGAGGCCT ACTTCTTTGA AGAACCATGA AGTCACACTA TATTGTGCTA      60

```

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GCTCTAGCCT | CCCTGACGTT | CCTGCTGTGT | CTCCCCGTGT | CCCAGAGCTG | TAACAAAGCA | 120 |
| CTCTGTGCCA | GCGATGTGAG | CAAATGCCTC | ATTCAGGAGC | TCTGCCAGTG | CCGGCCTGGA | 180 |
| GAAGGGAAGT | GCCCCTGCTG | TAAGGAGTGC | ATGCTGTGCC | TCGGGGCCCT | GTGGGACGAG | 240 |
| TGCTGCGACT | GTGTCGGTAT | GTGCAACCCT | CGGAATTACA | GCGACACCCC | GCCCACATCC | 300 |
| AAGAGCACCG | TGGAGGAGCT | GCACGAGCCC | ATTCGGTCCG | CTGTGCGAG  |            | 348 |

## (2) INFORMATION FOR SEQ ID NO:338:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGCCAGTCTT | CAGTTATAAC | CACTCCACCC | TCCTCACTTT | 60  |
| CTCTCTCTCT | CTCTCTTTT  | TTTTTTTTT  | TTTTTGTCTA | TGGGATTTAA | TGGGAAAAAT | 120 |
| ATGTAAAAAC | TGTCACTAGT | CAGCTGGCTC | TTTTTCCTAT | GAAATCTATC | AGTACCTTTC | 180 |
| TCCATCCGTT | GTTCTCAATA | ATGACCACAG | AGCCTGAGTA | TACCAAGAAA | ACCAATATTC | 240 |
| GCATTACAGG | TCACTCGAG  |            |            |            |            | 259 |

## (2) INFORMATION FOR SEQ ID NO:339:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 183 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGCCTTCTGC | AAGATGCTTC | TGATTCTGCT | GTCACTGGCC | 60  |
| CTGCTGGCCT | TCAGCTCAGC | TCAGGACTTA | GATGAAGATG | TCAGCCAAGA | AGACGTTCCC | 120 |
| TGGTAATAT  | CAGATGGAGG | AGACTCTGAG | CAGTTCATAG | ATGAGGAGCG | TCAGGGACCA | 180 |
| CCT        |            |            |            |            |            | 183 |

## (2) INFORMATION FOR SEQ ID NO:340:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 264 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGTTTAACT  | GAGTGCAACA | AGTATTTTCG | TTAAGAGATT | 60  |
| TTTTTTCGTA | ATTACCAT   | CTGCTGAATC | AATTTTAAAT | CCAGTTGGAA | GCTCTAAAT  | 120 |
| TCTAACATAA | TTCAAGCA   | TTAAAAAGA  | AGACTAAGGA | AGAGAAAGCT | ACATTTTAT  | 180 |
| TTCACTTGT  | ATTGCATTGT | GCAGAAAGGA | AAATAGTCTA | GCTAATTAC  | TTTTCCTATG | 240 |
| AAAAACCTTA | GAAGGCTCCT | CGAG       |            |            |            | 264 |

## (2) INFORMATION FOR SEQ ID NO:341:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

```

GAATTCGGCC TTCATGGCCT AGCCTTTCTA GTCTTCCCTC TTCTGTAGGA ATANCATGTT      60
CCTCAAATGG TCCTGAACCT TTTCACCATT TTGGTGAACC CTTTAAAGT AAATTTACTC      120
AATGCTTTAA AATTCATAGT CTTAAATATA ATGTGAATTT TGTTCAGG TATTATTCT      180
GGGGTACAAA AACTTCCCAG AATTACAGT AGGAAAGGAA ACCCCTTAT GATGTGGCTT      240
ATTATTACAA GCATTGAGAA ATGATGCTGG CTAAGTCAAA TCATTCCTTG AGACAGTGAT      300
TCCTAAATGT AATGCCGCCT TCCTGAACTC TCACATATTC TATATCATGG TTATTTTAAA      360
AAATATATTT TTAGCCTTTT GTAACCTTAG TCTTGTTTTG AGCAATCTCG AG              412

```

## (2) INFORMATION FOR SEQ ID NO:342:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

```

GAATTCGGCC TTCATGGCCT AGGGATTATA GGTGTGAGCC ACCGCGCCCG GCCAGGAATC      60
ATTTTATCC AGGTAAGGCA TACAGAACCG GAGGGTCTT GTCTAAGTTG TACCATGAAT      120
GTGTGCTCAG TGGCTACTTT GAAATAGACT TACTGTACAA TCCCTGAGCA GGAATGAAAA      180
TAAAAGCTGG AAATCACGGG TTGCTCTGGG GTTTTCAGGA AGGTGTCGTC CGTCTGGGGT      240
GAGTGTCTC CTTTCTCANG GGATTTTCATG TGGCATTATT TTGTTTTCAT CTGAGAGGCA      300
ACATAAGCTG GGAGGGAAGG GCTGCAAAGA GGGGGCCAGG ACAATGTGT ACCTGGGGGC      360
CCCCATTTTG ACTCCACCCT GAGCTGGGGC TGGGCCACAG GAGGGCAGAG GGAACACTTT      420
GGGACGGGGA GGGAGCCCTT GGAATGAAAG AATGGGGTGA CTCGAG              466

```

## (2) INFORMATION FOR SEQ ID NO:343:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

```

GAATTCGGCC TTCATGGCCT AGAATTTTGG AGTCTTTATC ATAGGTAACC TGGACCACAG      60
TTACTATTTA TTGACAATGT GATTGAGTGT ATGGAGGAAA GCACAGTGGA TGCTAGGCTT      120
TGTAATATG GGGATGTAGA AAAGCAGATA GTTCAGTGTC TACCTTTTTC TAGAACTACC      180
TTGAACCTTA AATTTAAGT CATGTTTATT GCTAGAAAAT TAAATGTACT TATTTAAACC      240
AATGAAAAAG CACATTTCTG AAATGAAGTT AGAGATAATC TCTGTGCTT ATAAAAAGAC      300
ATTAATAAAA ATCTGGTAAG GACTCGAG              328

```

## (2) INFORMATION FOR SEQ ID NO:344:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

```

GAATTCGGCC TTCATGGCCT AGTGACCAGA CATAAGAACT CATTTTTAGT TAAAGCATTT      60
TAAAAAAGTA TACAAGGCAG AGTTGCAAAC AATCTCAGCC TATGAAAAGG ACAGCTGCAG      120
TCAATGTTCC CACTAATATT TTCCATCCGT GACTGAGTG AATTTGTAAT GTGCAACTCA      180
TGTCAGAAA ATAACAGAT GTGCACCACA AGCGGAACAA CAATGAAAGA ACTTACATAG      240
ATTTTATTA AGATTGAACT TTTGATGTTG ATTCCACTGG TAAGAGAGCA CTGTAGGCAA      300
AGGTCTTGTA TTTATAAAGT TATCTCCTAT TGAGGAAGAT GAAGATGTCA ATACTCCCCA      360
ACAGAATGCT TTGAGCTCTT TCTAGTAGAT CTGTGCCAAC TCTGAAACAC CTCGAG      416

```

## (2) INFORMATION FOR SEQ ID NO:345:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

```

GAATTCGGCC TTCATGGCCT AGTAAATACA AAATACAAAA ATACTGGTGA GAGAATGGGA      60
TGATGATTAT ATTCTGGTT CAGTTTTTCT TCCTGAGAAA TTTGATAATA CATCTTTTGA      120
TTTTTAATAA GTGAAATAAC TGGTGACTGT GTTGATGTG TGTGTGTGTG TTTTTTTTTT      180
TTTTTTTAAA TAGAAGTGTG AAAAGAACT TCATCCACGG AACTTCAGG ATAATTTTGA      240
AACAGGCAAG TCATTTCCTA TCTTTTATA ATCTCTGCCT TGTGGGATTT GGTTCGGTTT      300
ACCTAACTTT GATTTTAGTG GGAGTATGTG AGCTGTGACT CGAG      344

```

## (2) INFORMATION FOR SEQ ID NO:346:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

```

GAATTCGGCC TTCATGGCCT AGCCTTCGGA ACCCCACCAG AGTCACAGCC AGGAAGGGCA      60
GCGGGGCGCA CCAGGCCGAA GGCTCACGCC ACAGGGAGGG CAGTAGGAC ATGGGGGGAA      120
GCGCGTTAAA CCAGGGAGTC CTGGAAGGGG ACGACGCCCC CGGCCAGTCC CTGTACGAGC      180
GGTTAAGTCA GAGGATGCTG GACATCTCGG GGGACCGGGG CGTGCTGAAG GACGTCATCC      240
GAGAAGGAGC TGGAGACCTA GTGGCGCCTG ATGCTTCGGT GCTAGATGCT TCGTCTTGGG      300
TAAACTCCTC GACTCCCAAG GCCCCAGCTC CATCTTTACC TCAGAGCCTC CTGAACCTCC      360
TCCTCCAGCC TCACCTTCCT CCAGCCTCAC CACTCCTCCC TGGACCTGCA GCTCCGCACC      420
CCCGGGGGCC TCAGAACTAC CCCTTCAGG GCCTCAGAAC TACCCCTACG GTTCTCCTG      480

```

CGTAACCTTC TGCCTACCTT CCTGAGAGTG GTTGGTGACA GCAGCCGGGG CTAGAAACCT 540  
CGAG 544

## (2) INFORMATION FOR SEQ ID NO:347:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GCCTTCATGG CCTACCCAGT GATTGTCCAC ATGGCCAGCA AGAGGAAATC CACCACACCA 60  
TGCATGATCC CAGTGAAGAC TGTGGTGTG CAAGATGCCA GCATGGAGGC CCAGCCCGCT 120  
GAGACCTTGC CTGAAGGACC CCAGCAGGAT CTGCCCCCAG AAGCATCTGC TGCCAGCAGT 180  
GAGGCAGCAC AGAACCCAG CAGTACTGAT GGCTCTACAC TGGCCAATGG GCATCGGAGC 240  
ACTTTAGATG GCTATTATA TTCCTGTAAA TACTGCGATT TCAGATCCCA TGACATGACC 300  
CAATTGTGG GACATATGAA CTCAGAGCAC ACAGACTTTA ATAAAGACCC AACCTTTGTA 360  
TGCACTGGGT GCAGTTTCT GGC AAAACC CCTGAGGGGC TTCTCTGCA CAATGCCACA 420  
TGTCACCTCG GGAAGCCAG CTTGTGTGG AACGTGGCCA AGCCAGACAA TCATGTGGTT 480  
GTGGAGCAGA GCATCCCTGA GAGCACCAGC ACTCTGACC TAGCGGGTGA GCCCAGTGCT 540  
GAAGGGGCTG ATGGACAGGC AGAGCTCGAG 570

## (2) INFORMATION FOR SEQ ID NO:348:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC TTCATGGCCT AGAAAAAGT TTTCAAAGGG AAGTAATCTT AAATCTGTAT 60  
ACTATTTTCT ATGATGGAAA TTCTGTGAAG AAACAATAAC AAATTCTCCC TGACTCCTGT 120  
CTGTCCTAAT AGTAAGGTGG TCTTCTTCT AATCTCCCA TCCATCCACC CATCAGGAAG 180  
CAACAGGGTA CCTTGTGTGA GTAACCTAG ATTTCTGACT TCTTCTCGCA CCTTCAGCTG 240  
GAGCACCTGT TCTAAGATGT GCTGCCGGAG GTTCTCCTGG GCAATCCCCA TTCGCTCGAG 300

## (2) INFORMATION FOR SEQ ID NO:349:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

GAATTCGCCC TTCATGGCCT AACAACCACC ACCACCTGGA CGCCCAGCAG CACAACCACC 60  
ATAGCCGGCC TCAGGGTCAC AGAAAGCAAA GGGCACTCAG AATCATGGCA CCTAAGTCTG 120  
GACACTGCCA TCAGGGTTC ATTGGCTGTC GCTGTGCTCA AAAGTGTCT TTTGGGACTG 180

|   |     |
|---|-----|
| CTGTGCCTCC TCCTGTGGTG GAGGAGAAGG AAAGGTAGCA GGGCGCCAAG CAGTGACTTC | 240 |
| TGACCAACAG AGTGTGGGGA GAAGGGATGT GTATTAGCCC CGGAGGACGT GATGTGAGAC | 300 |
| CCGCTTGTGA GTCCTCCACA CTCGTTCCCC ATTGGCAAGA TACATGGAGA GCACCCTGAG | 360 |
| GACCTTTAAA AGGCAAAGCC GCAAGGCAGA AGGAGGCTGG GTCCCTGAAT CACCGACGCT | 420 |
| CGAG  | 424 |

## (2) INFORMATION FOR SEQ ID NO:350:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AATTAGATTA TTTTGAGCTT GGGAACACTT GTACATGGTT  | 60  |
| CCCCGGGACA TAAATGTAGA AGTTCGTAG AGCAGTATCT TCACATTGAG GGATGTGAAG   | 120 |
| GCTTTGCAGA GTATAGATAG TTTAATGTAA TTTAGAGTTC TTCATTATCT TTCCTAGGAT  | 180 |
| CAGATATCTG CCGATGATGA CTTCTAACCC ATTCAGAATC TTTCTATGGT ATATTGCCCT  | 240 |
| GGGGTGTAAT ATCCTCCAGG ACCCTAAACA GATGGACAGT TGATGCATTT CAGGGTAAGC  | 300 |
| TGTAGACAAC AATATATTTG ACCCCTGAAA CAATTCAGTA TGCTTGTCAT TTGTTAACTA  | 360 |
| GAGTTATTTC AAACATAATT TTGAATAAAA AATAAATTTT AATAAATACA TGTTCCTCAAT | 420 |
| TATGCATATA AAAGCAATCC TCGAG  | 445 |

## (2) INFORMATION FOR SEQ ID NO:351:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

|   |     |
|---|-----|
| AATTCGGTTC ATGGCCTAAT TTTGGAAC TAAGACAGAT TTTTGTGTTT TGTGTTTATA   | 60  |
| AATAGCTGTT AACTAGTCTC ATAAGGACAA AATACAGAAA GACAGTTCCT ACAGAGAAAT | 120 |
| AGAAGCAAAA AAAGGAACCA ATGGAAAATT TAAAACTGAA AAATAGAATA TCTGAAATAA | 180 |
| AAAATTCCT AGATGACATA ACTGTTGAGG AAAGAGTATG TGAATTTGAA GAAAGAGCAA  | 240 |
| TAGAAATGTT CCATTGTAAA GAACAAAGAG AACTCGAG                         | 278 |

## (2) INFORMATION FOR SEQ ID NO:352:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

|   |     |
|---|-----|
| GAATTCGCCT TCATGGCCTA CAGATTATCT TACACTGAAC TGATCAAGTA CTTTGAAAAT | 60  |
| GACTTCGAAA TTTATCTTGG TGTCTTCAT ACTTGCTGCA CTGAGTCTTT CAACCACTT   | 120 |

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| TTCTCTCCAA | CCAGACCAGC | AAAAGGTTCT | ACTAGTTTCT | TTTGATGGAT | TCCGTTGGGA | 180 |
| TTACTTATAT | AAAGTTCCAA | CGCCCCATT  | TCATTATATT | ATGAAATATG | GTGTTACAGT | 240 |
| GAAGCAAGTT | ACTAATGTTT | TTATTACAAA | AACCTACCCT | AACCATTATA | CTTTGGTAAC | 300 |
| TGGCCTCTTT | GCAGAGAATC | ATGGGATTGT | TGCAAATGAT | ATGTTTGATC | CTATTCGGAA | 360 |
| CAAAATCTTC | TCCTTGGATC | ACATGAATAT | TTATGATTCC | AAGTTTTGGG | AAGAAGCGAC | 420 |
| ACCAATATGG | ATCACAAACC | AGATGGCAGG | ACTCGAG    |            |            | 457 |

## (2) INFORMATION FOR SEQ ID NO:353:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTATGGCCTA | GCAGGCGCCA | AGGTAACATG | AACAAACAGC | TGCTTGCTGC | 60  |
| CCCCAAGCTT | TAGTTTCTAG | TGGGCCTGGA | GCAATTGTGA | AGGACAACCT | CACCCAAGGC | 120 |
| CCAGTATTGA | AGAGGGGTAG | GGTGGGAGGA | TTGTACATAT | CGCGAACGCT | TGGCAAATCT | 180 |
| CTAGATTTTT | TTTCCTCCTA | GGAAATAATA | ATTTTTAAAA | AGGCTTGTA  | AAAATAATAA | 240 |
| AATGTTTCAT | GACAGCAGCA | GATGTAAAC  | TCCAGTACT  | CCGGCGGACC | TCGAG      | 295 |

## (2) INFORMATION FOR SEQ ID NO:354:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GCCTAGACAT | GATGGTGGCC | ACGTGCCAGG | GGACCACACC | CTATGTACAA | AGCAGGAGAA | 60  |
| TGATGCTCCC | AGCTGAGCTG | CAGGATGGGC | GCTGGGCTGA | CTGGAGGGGT | AGACGGGGTG | 120 |
| GGGTCTGACC | CCATTAGCCT | TTCCCCATCC | AACCTGGGCC | CCCATAAGCC | ATTCTCTGGC | 180 |
| CCTCTGCACA | AGACAGACTC | AGCAAATCTG | CGAGGTATGG | GGATTCTGCC | AACTCCCCAC | 240 |
| CTCGCCTCAC | CTTCCCTAGG | TCTGCGCGTT | AGGAGATTCT | GGAGCCAGAG | GGAGAGACCC | 300 |
| CAGAAACTCC | CCGGTCGGCG | ACCCAGCCCG | AGACGCCTGG | GGTCCCAAGG | GAAGCTGAAC | 360 |
| GCCCCGAGAA | TGGGGAAATG | GAGAGAGAAC | CTGAAAGAGC | CCCTGTAACT | CGAG       | 414 |

## (2) INFORMATION FOR SEQ ID NO:355:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | ATCATGGCCT | ACTCCCGAGT | AGCTGGGACT | ACAGGCATGT | GCCACCACGC | 60  |
| CCAGCTAATT | TTTTGTATTT | TTTTTAGTAG | AGATGGGGTT | CCACCATGTT | AGCTAGGATG | 120 |

```

ATTTTCGATTT CCTGACCTTG TGATCCGCC GCCTCGGCCT CCCAAAATGC TGGGATTATA 180
GGTGTGAGCC ACCACGTGGC CTCATTTTCAT TCTTTCATGT GGATAGGCAG TTGTTCCAGA 240
AGTATATAGT GAGGAGCTTC TTCTTTCTCT AATGATCTGC AATGTCACCT TCATCATTTA 300
TGAAGGTTGC ACATATACAT GGGAAATTTT TAGTCTGGCA TTAATGTTT TCAAAAGAG 360
TTCCTGCAAA CGTTTTGT TTTATTCCT ACTGTTCCCT TCACGTACTC TCTACTGAAC 420
TAAACTCTCT AATGTGTCTC GAG 443

```

## (2) INFORMATION FOR SEQ ID NO:356:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTC AAGAGCAGCC CACCTGTTCA GTATTCATAC 60
CCACATATCC ATAATAGAGC TCTTCTCTTC CCCCAGGTTT CTCTGCCTCA GCCTTTTCCT 120
CTTAGCAGAT GCCATCTGCA GGGCCACTTG GCTGCCCGTA GCAGTAACCG CACAGTCTTC 180
CACATTTACT CCCTCAGCCT CAGCTGCTCC TGCAGCCAG GCAGTGTCTC TGTCTCTGCA 240
TTGCTCAAGC CTCCACCATC TCGGTTACAC CCCACAGCCA CTCGAG 286

```

## (2) INFORMATION FOR SEQ ID NO:357:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 269 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

```

GAATTCGGCC TTCATGGCCT ACTGCCTTAG CCTCCCAAAG TGCTGGGATT ACAGGCGTGA 60
GCCACCATGC CCAGCCCTAT AGTAGTTCTT CTTTGGCCCC TTAATATCCT CACCCACATG 120
TCCTGTACCC TGCCTGAACC CTCCTCCTCT TTTGTTCTG ATCTTTGAGC TCCCTAGAGC 180
CCATAATTCT TTAGAGCAGG TATGTCCCGA GTCTGAAACA TGCCCTTATT TGTCCAAGC 240
TCTGGACATT TCTACCCCA TCTCTCGAG 269

```

## (2) INFORMATION FOR SEQ ID NO:358:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

```

GAATTCGGCC TTCATGGCCT ACCAAGGAAG CCTTTCTGTT TTTGGCCCAA GGAGCGTCAA 60
TAAGATCTTT GAAAATACTT TGAAGTCATT TTGTGTGTGT GTATGTGCAT ACACACCTGA 120
TTTGTTTTAT TTTTATTTT TATTTTGA GTTAGGGTCT GGCTCTGTCG TCCAGGCTAG 180
AGTGCAGTGG TGTGGTCTCA GTCAGTGA ACCTCTGCCT CCCAGGCTCA AGCCGCCCCC 240

```

CCACCTCGAG

250

## (2) INFORMATION FOR SEQ ID NO:359:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AATGGGAGAT TGGTGGGAGT AGGGAACACA AAAGGCATGG | 60  |
| GAAAAGAAGA TAGGTTGTAT TTTGGTCATA CTGACACCAA CATGCCTAAA GGATAGCCCT | 120 |
| GTGAAAAAAG CTAGCAGACA GTTGAAGTGC GGCTGTGAAA CAGGAAGCCG TGAGGGCTAG | 180 |
| ACTCATCGTT GTAGTCATTC GTAAAGAGTA AATACTTGA GCTATTGTAG TAGATGGTAT  | 240 |
| CACCACGGAA CACTCGAG   | 258 |

## (2) INFORMATION FOR SEQ ID NO:360:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGGAAGCCAC AGGTCGGCTC TGCATTAGCA GGAGCAGCCG | 60  |
| CCCTCGCTGG CCGGGGGCTC CTGGGGTTTG TCCAGCTTGA TGTCGATCAT CCCTTCTTTG | 120 |
| CTTTTCTCCT GGACATTCTC CATTCCGGGT AGAGCCGACG CCACACGTCG AAAAAGCTGC | 180 |
| TCACGTTGT AGCCAGTCTT CGCACTGGTC TCAATGAACA TGACGCTCAG TTCTTTGGCG  | 240 |
| CGCTGCCCCC CCCCTCGAG  | 259 |

## (2) INFORMATION FOR SEQ ID NO:361:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AAAGATTAGC CTGGGTAACA TAGTGAGACC CTGTCTCTAT | 60  |
| TAAAAAATAA TAATAAAAT AACATTCA TGGGTATTGT TCACTAAGGT ATTGGTTGTT    | 120 |
| AAGGCATTCA TTAAGGTATT GTTAAACTT GTGTTAAGCA TGTAAAGTC TCAGTAACTT   | 180 |
| TGGGATAGAA ATAAATGTG ATAAAAAGCT GAAAGAAACC ACCACAAGGG AGAGTCCTTT  | 240 |
| TTGAAATATT AGAGACATAA TGCTGTCTAA TAAAAACGA CATCAAAGAA AAACACACT   | 300 |
| ACAGTGACTG CAGACTTAAT GTTGCCAAC CATGCATCCT CCCTAGAAAT GCATTTGAAT  | 360 |
| TTGATTACT AATCTTTTAT TTAGGAAAT TACATTTTA CATTAGTGAG ATTGGCCCTG    | 420 |
| AG  | 422 |

## (2) INFORMATION FOR SEQ ID NO:362:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

```

GAATTCGGCC TTCATGGCCT AGTTATTCTT CTAATAGCTC AGCTACTTTT CCTTAAATA      60
TCTTTTCTC TGCAAGCCT TCATATAATT GTTGTATTA TAACAGTGAT GATGACTGCC      120
ACTCATTACA ACTGCTGTTG TTAATCTTTG TTGTATTTT AAACCATATG TTATTTAAAC      180
CATAAACTGC ATCATAAAG CAGTTTCTTT CTAATCCATG ATGACACCTG CTAGCCAGGT      240
ATCGTATCAA TTCTTACAG GTCTATTGAA TTCTAGACCT GCCTCGAG      288

```

## (2) INFORMATION FOR SEQ ID NO:363:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```

AAAAATTCA ACAAATCCTG AAGTCTTCT GTGAAGTGAC CAGTTCTGAA CTTGAAGAT      60
AAATAATTGC TGTAATTC TTTGATTTT CTTTTCCAG GTTCATGGTC CTTGGTAATT      120
TCATTCATGG AAAAAATCT TATTATAATA ACAACAAAGA TTGTATATT TTGACTTTA      180
TATTTCTGA GCTCTCCTGA CTTGTGAAA AAGGGTGATG AAAATGCATT CCGAATCTGT      240
GAGGGCCCAA AACAGAGACT CGAG      264

```

## (2) INFORMATION FOR SEQ ID NO:364:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```

GAATTCGGCC TTCATGGCCT AGACCTCAT CAATAGATGG AGACATACAG AAATAGTCAA      60
ACCACATCTA CAAATGCCA GTATCAGGCG GCGGCTTCGA AGCCAAAGTG ATGTTTGGAT      120
GTAAAGTGAA ATATTAGTTG GCGGATGAAG CAGATAGTGA GGAAAGTTGA GCCAATAATG      180
ACGTGAAGTC CGTGAAGCC TGTGGCTACA AAAAATGTTG AGCCGTAGAT GCCGTCGGAA      240
ATGGTGAAGG GAGACTCGAG      260

```

## (2) INFORMATION FOR SEQ ID NO:365:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

|            |            |            |             |            |            |     |
|------------|------------|------------|-------------|------------|------------|-----|
| GCGCCTATCA | CAAGCAGATC | ATGGGTGGCT | TCAAGGAGAC  | GAAGGAGGCT | GAAGATGGCT | 60  |
| TCCGCAAGGC | CCAGAAGCCT | TGGGCCAAGA | AGATGAAGGA  | GCTGGAGGCA | GCCAAGAAGG | 120 |
| CCTACCATTT | GGCTTGCAA  | GAGGAAAAGC | TGGCCATGAC  | ACGGGAGATG | AACAGCAAGA | 180 |
| CGGAGCAATC | GGTCACACCT | GAGCAGCAAA | AGAAGCTGCA  | GGACAAAGTG | GACAAGTGCA | 240 |
| AGCAGGATGT | GCAGAAGACA | CAGGAGAAGT | ATGAGAAAAGT | GCTGGAAGAT | GTGGGCAAGA | 300 |
| CCACACCCCA | GTACATGGAG | AACAACTCG  | AG          |            |            | 332 |

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

|            |              |            |            |            |            |     |
|------------|--------------|------------|------------|------------|------------|-----|
| GAATTAACAG | AGTTTTTCTAGA | ATTAGAATAC | TCAGAAATGG | GATCATCGTT | CAGTGTCTCT | 60  |
| CCAAAAGCAG | AATCTGCCGT   | AATAGTAGCA | AATCCTAGGG | AAGAAATAAT | CGTGAAAAAT | 120 |
| AAAGATGAAG | AAGAGAAGTT   | AGTTAGTAAT | AACATCCTTC | ATAATCAACA | AGAGTTACCT | 180 |
| ACAGCTCTTA | CTAAATTGGT   | TAAAGAGGTT | GAAGTTGTGT | CTTCAGAAAA | AGCAAAAGAC | 240 |
| AGTTTTAATG | AAAAGAGAGT   | TGCAGTGGAA | GCTCCTATGA | GGGAGGAATA | TGCAGACTTC | 300 |
| AAACCATTTG | AGCGAGTATG   | GGATCTCGAG |            |            |            | 330 |

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 200 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GCGATTGAAT | TCTAGACCTG | CCTCGAGTAC | GGAGCGAAAC | TCTGTCTCAA | AAAAAAAAAA | 60  |
| AAAAAAAAAA | ACCGAGTATA | AAAGGCATTT | TTTTCTTTA  | AACTAAGTAA | AATATAATGT | 120 |
| TGAATAGTTC | TATTTTGCTT | AACGGGCTTT | TGTTATTTGT | TTTGTGTAGA | AATTGGCATT | 180 |
| TTTCACATAG | AAATCTCGAG |            |            |            |            | 200 |

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGAGAAATGA | GGAAAAAGAA | GGAAGAATAT | TTAACTTTTA | 60  |
| GTCTCTTAC  | AGTTGTAATA | TTTGTGGTCA | TCTGCTGTGT | TATGATGGTC | TTACTTTATT | 120 |
| TCTTCTACAA | ATGTTTGTT  | TATGTTATGA | TAGCAATTTT | CTGCATAGCA | TCAGCAATGA | 180 |
| GTCTGTACAA | CTGTCTTGCT | GCACTAATTC | ATAAGATACC | ATATGGACAA | TGCACGATTG | 240 |
| CATGTCGTGG | CAAAAACATG | GAAGTGAGAC | TTATTTTCT  | CTCTGGACTG | TGCATAGCAG | 300 |
| TAGCTGTTGT | TTGGGCTGTG | TTTCGAAATG | AAGACAGGTG | GGCTTGATT  | TTACAGGATA | 360 |
| TTCTCGAG   |            |            |            |            |            | 368 |

## (2) INFORMATION FOR SEQ ID NO:369:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACATTCGGAG | AAGTTGAAAG | AATTACACCC | AGAACACCCA | 60  |
| TGTCTACCAT | GTTACTACAT | TTGTGTGTGT | GTGTGTGTGT | GTGTGTGTGT | CGGTGTGCAA | 120 |
| TTTAAATTAC | AATGGTCGAG | GAAGCTCTTG | CTGAGAAGGT | GATGTTGAAT | AAAGACTCTA | 180 |
| AAGACCCTAA | AGAGTTGAGA | GAGAGCTGTG | TGGAGTTCTG | GGGCCCAGGC | ACAGCAAGTA | 240 |
| CAAAGATCCT | GAAGCAGGAG | CATTCTTGGT | GTGTTCAAGG | AAAGCAGGAC | AACCTCGAG  | 299 |

## (2) INFORMATION FOR SEQ ID NO:370:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACCGCCTTTC | CATTATGCAA | CTGTGGTGGC | TTTTCTTTTG | 60  |
| TTATACGACG | ATTATTTGTC | AACCCCACTA | TCTTTGCACT | CAACCATGGG | CCCCCTGGGC | 120 |
| TCAGAGACCT | CGTGACAGTC | ATCTTCTCAT | CACCACATCT | GCAAATGTGT | GGGTGGATGG | 180 |
| GGCAGCAACA | GTCCACCTCC | TCCAAGAAGC | AGTCCCTGAT | TTTTCTCTCC | CAGACAAATC | 240 |
| TTCTGCTCTC | TGTTCTTGGA | AACTCAAAGA | ACTAAGCACC | TCCCTCGAG  |            | 289 |

## (2) INFORMATION FOR SEQ ID NO:371:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 540 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| AATTCGGCCT | TCATGGCCTA | CAAGCTCGAT | CATTATCCTT | CTGTGAGTTA | CCATCTGCCA  | 60  |
| AGTTCATCCG | ACACCTCTTT | CAATTCTCCC | AAGTCGCTCT | TTCTGGGAAA | AGTTATAGAA  | 120 |
| ACAGGGAAAA | TTGACCAAGA | GATTCACAAA | TACAACACCC | CAGGATTAC  | TGGTTGCCTC  | 180 |
| TCCAGAGTCC | AGTTCAACCA | GATCGCCCCT | CTCAAGGCCG | CCTTGAGGCA | GACAAACGCC  | 240 |
| TGGGCTCACG | TCCACATCCA | GGGCGAGCTG | GTGGAGTCCA | ACTGCGGGGC | CTCGCCGCTG  | 300 |
| ACCCCTCTCC | CCATGTCGTC | CGCCACCGAC | CCCTGGCACC | TGGATCACCT | GGATTTCAGCC | 360 |
| AGTGCGGATT | TTCCATATAA | TCCAGGACAA | GGCCAAGCTA | TAAGAAATGG | AGTCAACAGA  | 420 |
| AACTCGGCTA | TCATTGGAGG | CGTCATTGCT | GTGGTGATTT | TCACCATCCT | GTGCACCCTG  | 480 |
| GTCTTCCTGA | TCCGGTACAT | GTTCCGCCAC | AAGGGCACCT | ACCATACCAA | CGTTCTCGAG  | 540 |

## (2) INFORMATION FOR SEQ ID NO:372:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

|             |            |            |             |            |            |     |
|-------------|------------|------------|-------------|------------|------------|-----|
| TCGACCCCTG  | GCTAATGACA | AACTATGTGA | CCTTCATGGT  | GGGGGAGATT | CTGCTCCTCA | 60  |
| TCCTGACCAT  | CTGCTCCCTG | GCTGCCATCT | TTCCCCGGGC  | CTTTCCTAAG | AAGCTTGTGG | 120 |
| CCTTCTCAAC  | TTGGATTGAC | CGGACCCGCT | GGGCCAGGAA  | CACCTGGGCC | ATGCTCGCCA | 180 |
| TCTTCATCCT  | GGTGATGGCA | AATGTCGTGG | ACATGCTCAG  | CTGTCTCCAG | TACTACACGG | 240 |
| GACCCAGCAA  | TGCAACGGCA | GGGATGGAAA | CGGAGGGCAG  | CTGCCTGGAG | AACCCCAAGT | 300 |
| ATTACAACCTA | TGTGGCCGTG | CTGTCCCTCA | TGCGCCACCAT | CATGCTGGTG | CAGGTCAGCC | 360 |
| ACATGGTGAA  | GCTCACGCTC | ATGCTGCTCG | TGCGAGGGCG  | CGTGGCCACC | ATCAACCTCT | 420 |
| ATGCCTGGCG  | TCCCGTCTTT | GATGAATACG | ACCACAAGCG  | TTTTCCGGAG | CACGACTTAC | 480 |
| CTATGGTGGC  | CTTAGAGCAG | ATGCAAGGAT | TCAACCCAGG  | GCTCGAG    |            | 527 |

## (2) INFORMATION FOR SEQ ID NO:373:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GGCAAGAAAG | GATGTCCGCA | CAGCTGGCTG | CTGCTGAGAG | CAGACAAAAG | AAGCTGGAAA | 60  |
| TGGAGAAGCT | TCAGCTACAA | GCCCTTGAGC | AAGAGCACAA | GAAGCTGGCT | GCCCGCCTTG | 120 |
| AGGAAGAGCG | TGGCAAGAAC | AAGCAGGTGG | TCCTGATGCT | GGTCAAAGAG | TGCAAGCAGC | 180 |
| TCTCAGGCAA | AGTCATAGAG | GAGGCCGAGA | AGCTCGAAGA | CGTAATGGCC | AAACTGGAAG | 240 |
| AGGAAAAGAA | AAAGACGAAT | GAATTAGAAG | AGGAACCTCT | CGCTGAGAAA | CGAAGAAGCA | 300 |
| CAGAAATGGA | AGCTCAGATG | GAAAAACAAC | TCTCTGAGTT | TGACACTGAG | CGGGAACAGC | 360 |
| TTCGTGCCAA | GCTGAACCGG | GAAGAAGCAC | ACACCACAAA | CCTCGAG    |            | 407 |

## (2) INFORMATION FOR SEQ ID NO:374:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

```

GAATTCGGCC TTCATGGCCT ACTCTGTTTT CTCCCTGGAC TTATGTGCTT CGTCTGGAAT    60
GTTACATCTC TTCCTCTCTT TCTTTTTTTT TGGTCCCAT GTTGACTGTT TTATTGGGGT    120
TTCTGGATAT CTCGGGGCCA CCTCACAGGA AGCGGTTTGC AATGAGATCA TAAACATTGC    180
CGAAAAATCT GTTCATTACT GCAGCACTGT TTCTCATCCC CTTGACTTTC ATCACAAGGT    240
ATCCCTTCTT GACAATAAAT CATCTTTAAT CATTTCTCAG CAACCTCAAG CCCAGCAGCG    300
AAGAGTCACC CCCTATCTCG AG                                     322

```

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

```

GAATTCGGCC AAAGAGGCCT ACCTAAACCG TCGATTGAAT TCTAGACCTG CCCC AAAACC    60
AACAAGGAGA ACAAGCTCAG TCTTCTGTGT CTTAATTTT GGCTTTACTC TAGCCCTGTC    120
CCCATTTCTT AGGCTCTCCA CAGTCCAGCC GCTTTGAGCT ACTTTTCCTT CCCTGATATG    180
TGCAGCTCTC TCACCTCTGA GCCTCCGCAC CTGCTGTTC ACAGCACTCT CCGCATGCCC    240
TTCTCCCACT GTGGCTCACT GCTGAGCTGT GTTCAGGCCC TTTGGGAAC CCTCTCTTTC    300
ACTCCTTTTC CCTGGTCTGG CTTGGGAGCC CATGCTTACC CCTGTCAGGA CACCTTGAAA    360
CCCAGCAGTG AAAACATGAC ACTTCCTTGT CTGGCTGATT TTCTTAGTGA AGCGAGTAGG    420
AGTTTCCTTT GTCAGGACTT CAGCAAGCAA AATTCAGGAG AGGTCATAAA ATGTCTCGAG    480

```

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

```

GAATTCCTAGA CCTGCCTCGA GTAACCAGAG AGTCTTGTC ACATTAACAC TAGCAGTATT    60
TCCAACACTT TATTTTTTTA ACTTCCTTTA TTATACAGAA GCAGGATCTA TGTTTTTTAC    120
TCTTTTTCG TATTTGATGT GTCTTTATGG AAATCATAAA ACTTCAGCCT TCCTTGGATT    180
TTGTGGCTTC ATGTTTCGGC AAACAAATAT CATCTGGGCT GTCTTCTGTG CAGGAAATGT    240
CATTGCACAA AAGTTAACGG AGGCTTGGGA AACTGAGCTC GAG                                     283

```

(2) INFORMATION FOR SEQ ID NO:377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

|            |            |             |             |            |            |     |
|------------|------------|-------------|-------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAACAGCAAA  | GAACAACCTCA | TCACCGCTCA | CGTTCAGTAT | 60  |
| CTCCTCATCG | CGGCAATGAT | CAGGGAAAAGC | CGCGTTCACG  | TTTACCAAAT | GTGCCATTAC | 120 |
| AGAGGAGTTT | AGATGAAATT | CATCCAACAA  | GAAGGTCACG  | TTCTCCAACC | AGACACCATG | 180 |
| ATGCCTCCCG | AAGTCCAGTT | GATCATAGAA  | CCAGAGATGT  | GGATAGTCAG | TATTATCAG  | 240 |
| AACAAGACAG | TGAGCTTCTT | ATGCTGCCCA  | GAGCAAAACG  | AGGACGAAGT | GCAGAATGCC | 300 |
| TACATACTAC | CAGAATGTCT | CGAG        |             |            |            | 324 |

## (2) INFORMATION FOR SEQ ID NO:378:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACTGAAATTT | CAATAAAACC | AGCTTGAAAG  | TTCCATTACT | 60  |
| AGAAAGATAA | GAGTGGTCAG | AAAACATTTT | TTATTAACCT | ATTTTCATCTA | GTAAGAGTAT | 120 |
| CTTAAATGTT | TTTTCTCTTG | AGTACTGAAT | ACACATGCAG | GACAATGGAC  | CTAAATACAG | 180 |
| TTAACTTTTG | TTTTTCACTC | CTTTGCTTTT | GCATTGTCAA | TAGTCCGGTA  | AGGTTTAGGT | 240 |
| TCTATCAGAA | GTAICTAGAC | ATGCAGTGGG | CAATCGATAA | TTTCTACCTG  | GGCCCTGGAT | 300 |
| GCTTGGACAA | CTGCAGGGGC | CATGGAGATT | GCTTAAGGGA | ACAGTACTCG  | AG         | 352 |

## (2) INFORMATION FOR SEQ ID NO:379:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGTCTGTGTG | TAGTGGAAC  | TCTATTGCCT | GCCCTGCACA | 60  |
| TCTGCTCCTT | TTCTTCTCTG | CACTCTGGGA | CAGCTTCTAA | AGTTTGTTCA | ACATGTCATT | 120 |
| GACTGAGTTT | TGTATCATTT | CAGTTCTGCT | CTTTACTGGT | TCCTATGTGG | ATGCTAATTA | 180 |
| TGCAAATGCA | TTTTCCACCT | CTTGCACTCC | TTTTTCTAAG | TCACCTCACT | TCTCATTTCC | 240 |
| TCATGTTTTT | CCNTTATCCT | CTTCTCTCGA | G          |            |            | 271 |

## (2) INFORMATION FOR SEQ ID NO:380:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

```

GAATTCGGCC TTCATGGCCT AACGCGGCCA GCGGATTCGG TGAAGCGATT CCTGCAGGCC      60
TTGGTTCCCC TC'TTGACCT GGTACAAAGA ATTTTACGTG AAAGATTTTG TCGTCAGAGT      120
CCACATAGTA ACCTATT'TGG AGTGCAAGTA CAATACAAAC ACTTAAGTGA GCTGCTGAAA      180
AGAACTGCTC TCCATGGAGA GAGTAACTCT GTCCTTATTA TCGGACCCCG AGGATCAGGA      240
AAAACTATGT TAATAATCA TGCTTTGAAA GAACTCATGG AAATAGAAGA AGTGAGTGAA      300
AATGTATTAC AAGTTCACCT AAATGGACTG CTGCAGATCA ATGACAAAAT CGCCCTAAAG      360
GAAGTCTCGA G                                     371

```

## (2) INFORMATION FOR SEQ ID NO:381:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 277 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

```

GCAGAGTTAA GCAAATTAAT TATAGCTATC TTAAAGCTAT AAATGTGTTA ACATGTATAT      60
ATACCATTTA TTATGTTCTA CTTTAGTGAT ATACCTTAAT TTAGTGGGCT TTGGCAGGGC      120
GGGGGAGGGG GAACGTTTCAT TAATCTCTGA GGAAACAAA ACCTGTTTTC TACTTGAGTC      180
TAACATATGG TCCCAATTTA TTAATACTTC TGTTAAATTT GATGTCAGGT CAACATTTTT      240
CAGAAATGTA TTTATTCTCA GAAACAGAAC ACTCGAG                                     277

```

## (2) INFORMATION FOR SEQ ID NO:382:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

```

GAATTCGGCC TTCATGGCCT AGTTGTTACT GGAGTTAAAG AGAGAACTGA GAAAGACAAA      60
GGAGTAGAAC GTTACTCAA ATAAGTAATA ACAGAAAACCT TTCCAAACCA GAATATACAG      120
CTACAGGAAG GTCAAGGGTC ACCAATCCGA GTTAAGTCAG ACAAGAATAC TCCAATTTAC      180
AAACTCATAA GGGTCAAAGA CAAAGAGAGA ATTTAGAAAA CAGCAGGAGA ATAGAAGCAA      240
ATAACATATA AGATAGATCC AATATGCTTG GTAGCAGATT TCTCAGCAGG      290

```

## (2) INFORMATION FOR SEQ ID NO:383:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```

GAGAGTGTGG AGAGGGTACA TTTCCCTTGT ATNCTATGTT CTTCTTTCTA GTGGGTCTCA      60
TGTAAGATA GAGATATTTT TTTGTTTTAG AGATTCCAAA GTATATATTT TTAGTGTAAG      120
AAATGTACCC TCTCCACACT CCATGATGTA AATAGAACCA GGAATAAATG TGTCTTTGTG      180

```

ATAATCCCAT AGCAATTTAT GGTAAGAACA AGACCCCTTT CCCTCACCAC CGAGTCTCGA 240  
G 241

## (2) INFORMATION FOR SEQ ID NO:384:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

GAATTCGGCC TTCATGGCCT AGAAACACAA TAAAGCCCCA CAACAGCAAA CTTTTTAAAC 60  
GACGAAAGAG AGCTCTAAAT AACAGCAAAA TGCTGCTCTT CTTGCTCCCA TTATGTTTAC 120  
TATTACTGTG CTCTAGTGAG AATAGCAAGG GGTCAAAGGA ATTTATAACA CTTCTATAC 180  
CTTCAACTTA CCAAGTCCCC TACCAAGTAA CAGTTTCTG TCAGAGAGAA AGTTCTGCCC 240  
TCCCTGCTCA AAGGTGTCCA TGCCAAC TAGTCCCTG TAGCTACCTG GGTCTCGAG 299

## (2) INFORMATION FOR SEQ ID NO:385:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

GAATTCGGCC TTCATGGCCT AGAAAGAGGT GGCAGAAGGA ATGGTAGGAA GGGGAGGATG 60  
TAAGCGATAT CATCAAGTCA GAATCATGAG TTCTTGGTGC CCGGATGTTA GAGGAGGGAA 120  
AAGGTGAAGA TGGCTGAAGC TGTACACTTT CATGATGGTG GAATGGAGGG GTCCCTTGGG 180  
AATTAGGGGT GTCTCTAGGA AGAACCAGCT TAGGGTACAT TGAGAAAGAG GAGACAGGCT 240  
AGGCAGGTCT AGAATTCAAT CGCAGATCAC AGCTACAAGG ACCAGGCCCTT TGATACTCTG 300  
AGCCTCGATA GCTCTGATAG CATGGAGACC AGCATCTCTG CTTGCTCACC AGACAACATC 360  
TCTAGTGCCA GCACTTCAAA TATTGCTAGA ATAGAAGAAA TGGAGAGACT TTTGAAGCAG 420  
GCTCATGCAG AAAAGACGCG GCTGCTCGAA TCCAGGGAAC GGGAAATGGA AGCCAAAAAA 480  
CGAGCCCTGG AAGAAGAAAA ACGACGCCGG GAAATCCTGG AAAAACGATT ACAGGGATAG 540  
CTCGAG 546

## (2) INFORMATION FOR SEQ ID NO:386:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

GTTAGGATCA TACATCATAG GTGTATGTTT AACTGTCAA GAAACTGCCA AACTGTTTCC 60  
CAAAGTGGTT GTATTGTTT ACATTTCAC GAGCAGTGTT TGAGAGCTCC AGTTCTTGCA 120  
CATCCTAGCC AAAAAAGGT TCTGTTTTT AAAGACAATT TTTTTTTCT TTGAGAGTTT 180

|   |     |
|---|-----|
| CGCCCTAGTC GCCCAGGCTG GAGTGCAGTG GTAAGCGAAT CCCTGCTACA GGCCAGAGAC | 240 |
| TGTTCTCAGT TGGTTTTTAC ACCAAGTATC GCACITCATT CTAACACTCC ACCATTTTAC | 300 |
| AAATGAGATT TCTCGAG  | 317 |

## (2) INFORMATION FOR SEQ ID NO:387:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 234 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGGTCAGGTT AGTCAGCTAA TCGATAAGAG ACTTGAAATT | 60  |
| ACTCTTTTGG GATTAGCAA TAGAAGGGAA AAACATGATA AGGSCACAGA GCGGTGGGTC  | 120 |
| TGGGGGAAAA AGCAGAGGCA CAGTTTGAAA AAAATGTGTA AGAGACTGAC TAGGTAAGAT | 180 |
| ATGGTCACAG TTCATAAGTC CTTTGAATTC TAGGATTAAA AAGGTGAAC CGAG        | 234 |

## (2) INFORMATION FOR SEQ ID NO:388:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 294 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACTAGATAAG TGTCAATTCC ATCTGCTTCT GATTTCCCAC | 60  |
| GTCAC TGCC TGGTCCACAC ACTGTGATCT TCTGCCCCCA TCTGAGTGCC GCATACTCAG | 120 |
| CCTTGTCCT GCATCAGACC CCGGCCAGC ACAGTAACGA GAATGGGCTT CCTAACACA    | 180 |
| AATCTGATT GTTCCGCCTT CCACTTCCTA GTGGCTTCAT TCTCGTGCCC TCACTCAGGG  | 240 |
| CCCTCACACA TGCTGTCCC TGCACCTCCG ACACCCTTCC CAGCGCCCCT CGAG        | 294 |

## (2) INFORMATION FOR SEQ ID NO:389:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 215 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AAGCAAAGCT AAGTGTAATA CTAAAAAGCA GTTTGTGCA   | 60  |
| ACTGGTCATA AAAGTGATTA AATCTAAAGC TGGCATTAAAT AAGGAAGCAA GGTAATAAAA | 120 |
| CAAAAATATA AACAGCTTTG AGAAAGTACA CCTAATAACA AAATCTTGTA ACACAACAAA  | 180 |
| TGAAAATCAC AAAAAATATA AGGAGACTCC TCGAG                             | 215 |

## (2) INFORMATION FOR SEQ ID NO:390:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```
GAATTCGGCC TTCATGGCCT AGAAAAACAC TATAGTCACG CAAGTAATGA CCCTTCTTAT      60
CCTCAACCCC CAGCATATAT GCACAAGGAC AAACAGTATA CATACAATCT CACCTGAGAG      120
ACGTCCTCAG ACTTGTGTTG AAACCTTATC ATGCTGCATT ATCTCCCTTA CAACATCCTT      180
CCTGCCTTGT TTCTCATTTT CACACTATAC GGAGTAAAAA AATATACAAT TTCTATATAT      240
TATATATATA ACCTCCATAT ATTTTATACT ATTTTCATATT TTTATACTAT CAGATTAATG      300
TTTTATATTT TATCTATCAT TTAAATATG CTATGTAAAG CATCTACAAA ATTGGTCACC      360
ATTCCTATGG GAAGTATCTG CAGAACTCTA GAAATGAATT CATCTTTTGC TTACCCCTCC      420
CTTTTGAGG GGACAGGGAC TTTCTTCTTT TCCCTCATCT TCATCTTCCC CCTCGAG      477
```

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```
GAATTCGGCC TTCATGGCCT AGTAGTCAG AGTGAAATAT TCAATAATGA GTGGTGCAGC      60
CTTGGGACTT GAGATTGTTT TTGTCTTTT TCTGGCATT TTTCTGCTTC ATCGATATGG      120
AGACTTTAAG AAACAGCATA GACTTGTGAT TATTGGAACA CTGCTTGCTT GGTATCTCTG      180
CTTTCTTATT GTCTTCATAC TGCCTCTGGA TGTTAGTACG ACAATATACA ACCGGTGCAA      240
GCTCGAG                                         247
```

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```
GAATTCGGCC AAAGAGGCCT AGTCATCTGC ATTTATTATG AGCAGCAGGT GGGACACTTC      60
CAGCAACAGT AAAAAAAGT AATTACAAA AGCAGGTTTC AGTGAAGCCA TCTGGTTGTT      120
ACCCCTGGGT GCTCACAGT AGATGCCAAC CCAGAGCAGC AGGAAGAGGA CTCCAAGCC      180
CATGAAGAGT GAGGCCACTA AGGAGATGAG GAGCTCTTTA TAGATATCAC GAGTGTAATT      240
GGTAGAGGTG ACCTCGTAAA CGAAGAACCA GGCGGTGAAG AACATGCCAA TGGCCAAAAG      300
CACCACGGTC AGATGGGGGA AGACAGCTGG GTTCACTGGG CTGGTATATC TGCTCATGGC      360
CTCGAG                                         366
```

(2) INFORMATION FOR SEQ ID NO:393:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 205 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT ACCCTGGGTT AACATTCAAG ATGGTACATG CTGAAGCCTT | 60  |
| TTCTCGTCCT TTGAGTCGGA ATGAAGTTGT TGGTTAATT TTCCGTTTGA CAATATTTGG  | 120 |
| TGCAGTGACA TACTTTACTA TCAAATGGAT GGTAGATGCA ATTGATCCAA CCAGAAAGCA | 180 |
| AAAAGTAGAA GCTCAAAAC TCGAG  | 205 |

(2) INFORMATION FOR SEQ ID NO:394:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 387 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

|   |     |
|---|-----|
| GAATTCTAGA CCTGCCTCGA GCCGGAGATG GANAAGAAAG TCAGCCTACT CAAGGACAAT | 60  |
| AGCTCTCTGG AATTTGACTC TGAGATGGTG GAGATGGCTC AGAAGTTGGG AGCTGCTCTC | 120 |
| CAGGTTGGGG AGGCACTGGT CTGGACCAAA CCAGTTAAAG ATCCCAAATC AAAGCACCAG | 180 |
| ACCACTTCAA CCAGCAAACC TGCCAGTTTC CAGCAGCCTC TGGGCTCTAA TCAAGCTCTA | 240 |
| GGACAGGCAA TGTCTTCAGC AGCTGCATAC AGGACGCTCC CCTCAGGTGC TGGAGGAACA | 300 |
| TCCCAGTTCA CAAAGCCCCC ATCTCTTCCT CTGGAGCCAG AGCCTGCGGT GGAATCAAGT | 360 |
| CCAACTGAAA CATCAGAACT TCTCGAG                                     | 387 |

(2) INFORMATION FOR SEQ ID NO:395:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 553 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

|  |     |
|--|-----|
| GAATTCGGCC AAAGAGGCCT ATCGAGAAGC CTTGTTTATT TAATGTGAGT TTGTGCCTTT  | 60  |
| TTGTCTCAAT CTTCCAATAC AGGTATATTG AGAAAAAAG CAGTCTAATA AAATCCTAGA   | 120 |
| CAGAACTTTC TGGAGTCCAG TTTGGTGATG TCCATTTTCC AGCTGTATGT ATCCTCAAAC  | 180 |
| TTGCACTGAT AACC GCCATT TTACCAAGGC AGGATTAGGA AGAGGTACAA AGGTGTGTCT | 240 |
| GAAAATTTT GCACGTGGAT TTCTGCATAT AATAGTCCCG TGTCAGTTTA CTTATGCAAA   | 300 |
| CATTGCACAT CTGAATTGTA ATTGGGCCGT TTCCTACTGA CAGGATGTCC TTTTGCTTTT  | 360 |
| GTCTGCCTCC TCTTCACATC TTCCTCTTTA TCCACCCTGC AGCCGGGGGG CGGGGGAGAC  | 420 |
| CGGATCCAG GCAGGACAGT GGCTAGGCTG CGTGTCCCCA CCCCCGACCC TCGTTTGACC   | 480 |
| CCTGGGAGCC GGGGCGAAGA CAGCACAAAG ACGGAGCCCT CGGATCCCTC ACGAGTGGGG  | 540 |
| CAGAGGCTGC GGG   | 553 |

(2) INFORMATION FOR SEQ ID NO:396:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

```

GAATTCGGCC AAAGAGGCCT ACAAGGTTAC TTGACCAAGA TGGTGACATT GTAAGATTG      60
AACAAAGGAA ATGTGACTTC AGAGTCATGG TTGTTAACTA TGCTATGAAG TAGGAAAAC      120
TTATGAGGTC TTTTAACTC AAACAGTCGA GTTTAAAGTT GAGGGTTAGC AATGATGAAT      180
GAGTGGCCAA AAAATGTATT CATATTTTTA GTCTTCTTA GAATTACTGG TAGTTGTGCA      240
CAACTAGAGG GTATTTATTT GTGTGTGTAT GTGTCGTGTG TGTACGAGTG CTGGAAATAC      300
TCTGCCAGTT TACAGTAGAG GCAGGCTTAC ATAATTCAGT CATGAAAGCT GAGGCTTATA      360
GTTTAGAGGG GATCGTCCTC TTCTTAATGA GTCTGTAAGT TACAAAAATA ACTTTTTTCT      420
TTATTACTA ACTGGTTGGT TTTTAATATT AAAATATTAG GTGCTTCTCG AG              472

```

## (2) INFORMATION FOR SEQ ID NO:397:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

```

GAATTCGGCC AAAGAGGCCT AGATTGGGGG ACATTCTTCT TTAGAAGGAA AAGAGTCTAA      60
TTAGTGATA TTAAGTAATT AAATAATACA TACTATCAAA TATTATGAGA GTCACATGAA      120
CCATGAAGTC TTTACTTAAT TTAGGAGAAA TGGGGAATAT TTTCTATCAT TCCTGATAAC      180
AGAACTAGAT ATTTCAAGAT CATAGTCATG GAATGTAATC CATAATACCA AACAGGGTGC      240
TTTACTTTGA AGCCATTGAC CATTAAATTT GATTGTAGT AGCACAGGCT ACCAAAAAAT      300
AGCAAGGAAT ATGGTATCCA CACAGATCTC GGCTGGCCTC AAGTAATCAA AAGTGAGAAT      360
GAAACATACA TGACACAAC TGGGACCTCT GGGTTTCTGA GACGTGGGCT ACAAGATTAT      420
ATTAGGTAGA AACTAAAGG AAATGTATTC CAAGCAAAAG TGGCAAGGGA ATTTACAGA      480
ACTAATTTT TAAGGGAGGT AATAAAAGCA GCAGTTAAAA TGCATGTCCA TGTATCAGAT      540
TCCTGGAG                                         548

```

## (2) INFORMATION FOR SEQ ID NO:398:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

```

GAATTCGGCC AAAGAGGCCT AGGCTAAATA CCGGCACGAG ACCGATTTTC TGAAGACAGC      60
AGATTATCA CTGTTAATCC AGCGGAAAAA AACACCTCTG GAATGATAAG CCGCCCTGCT      120
CCAGGGAGGA TGGAGTGGAT CATCCCTCTG ATTGTGGTAT CAGCCTTGAC CTTCTGTGTC      180
CTCATCCACT TCTCAAAC TC GGAGAACTGC AAGGAGCTGC AGCTGGAGAA GCACAGGGC      240
GAGATCCTGG GCGTGGTGGT GGTGGAGTCG GGCTGGGGCT CCATCCTGCC CACGGTGATC      300

```

```

CTGGCCAACA TGATGAATGG CGGCCCGGCT GCCCGCTCGG GGAAGCTGAG CATCGGGGAC 360
CAGATCATGT CCATCAATGG CACCAGCCTG GTGGGGCTGC CCCTCGCCAC CTGCCAAGGC 420
ATCATCAAGG GCCTGAAGAA CCAGACACAG GTAAAGCTCG AG 462

```

## (2) INFORMATION FOR SEQ ID NO:399:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 428 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

```

GAATTCGGCC AAAGAGGCCT AGGCCGGGCA CACAGAAAAA TGCAGGAAT AGAAATGCTT 60
GCATACTCTT GATTTTTTTT TTTTTTTTGT GTGTAAAAA CACACCTCC CCTCCCACCC 120
CAAAAAACAT CAAATTCCTT CTTTTCCTCC AAATCCCTGG ATCTTGGAAT GAAAGCCACC 180
CTTCCCAAT CTGTCCTCAC CTCCTTCAGC CCATCCAAGT TATGCACAAA AAAACAAAAA 240
TTAGTGAGAA ATTTGGGGAT TTGCACAACA AAAAATTAGA TAATGTTTTC CAAAAGTAGG 300
TCTTCTATGC TGTGTCAAAA AAAGTTTCCT ACAGACTGAG GATATTACAC CGACAGGAGC 360
CTGGGGGTTA AATGAGCCTT TATTAGAATG TTGTAGCAGT TGTGTTTGAA GCGGTGGGCC 420
CTACAAAA 428

```

## (2) INFORMATION FOR SEQ ID NO:400:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 269 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

```

GAATTCGGCC TTCATGGCCT AAGTTGAAAC TTACGAGTAA CATACCTGGT GTCTGATTGG 60
TTGTCATACT TTTCATTTTC CTCCTTTTCA GATCCAATCC ATTCTACACA TTATACTGAT 120
TTTTTCCTAG TGTAAGTATT TCTGTTATGT CACTTGGCTG CTTAGGCTTC TTAATGCTTA 180
CTGTATCAGG TGTAACACC TTTTGCTTAC CTTTCCAGGC CTTTTTAGAG TCTTATATAG 240
CTTACTCCCA TGCTCCAACCT CCCCTCGAG 269

```

## (2) INFORMATION FOR SEQ ID NO:401:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 236 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

```

GAATTCGGCC TTCATGGCCT AGGCACTTTG AAGAGATATA GAACTCCGTG TATCACATT 60
TCCATTTTFA TTCAATTTT TAATTGCCCA GAGCCTAATT TCTGTGGGCC TCTGCTGATT 120
TGCACATTG AGATTCTGT GTAAATATGC GTGTGGCATG TGTACACGCC TGGGCCTCCT 180
TATCACAAAG TGTGCTCTCT CAGTGTTTAA ATACACACAA TCCACATCGA CTCGAG 236

```

## (2) INFORMATION FOR SEQ ID NO:402:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

```
GAATTACCTT ATACACATAG CCTGAAGGTA ATTTTATACA ATATTCCAA TAGTTTGTG      60
CTTCAAACAA AGTTTGGGTA CATTGAACCA TCAGAAAGGA AAGGTGTCAT TGTCTCAGCC      120
ACCCATGTGG ACAATCTCTG GTTGTTTGGC ATCACTGTTG TTGCTGAGTC TGAATGTGAG      180
GAACATGCCA TTGGCATGTC TGCCACACAC ACACACCATT TTGTTATCTT TTGTGGGTGT      240
GCTTATGTGG GGAATCTGG GCGTGTGTGA AAAAAATATA TTGCAGCTCG AG              292
```

## (2) INFORMATION FOR SEQ ID NO:403:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

```
GAATTCGGCC TTCATGGCCT ACTTGGGGTA CTGAGATACA TGGGGCCGAA AAGGGGTAAT      60
ATGGCCATCT TTTATCAGAA AAAGTGACAA AACGGGAATT TAAAAAATGA ATTTTCCATC      120
TGACTTTATT TCCAAATACA CTTTCTTTT TAAAAACCA ATACACTTTC TTGAGGATG      180
ACAGTATTAG GAAATCCAAT TATACAAAAA ATACTACATC TAGTCTGGGG TAGATATATT      240
TATTTTGGT AACATACATT AAGTGGCACT AATTACACAG TAACTATAAG GTAACATAACA      300
TGAAACCACA GAACTGTAAC TCTGCCACAG CTGCATGAAC TCGAG                    345
```

## (2) INFORMATION FOR SEQ ID NO:404:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 252 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

```
GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAGCCATTAA TCTAATTAAT TGTTTAATCC      60
TGCTTACAAG ATTATCTTGA AAAAAATGTC TGGGGAGTAT GGTATAATGA ATTACGGGTC      120
CAAGAATTTG GGTTCAGATA CCACCTTCAG TCTTTACTAA GCTGCGTGAC TTTAGCAAAG      180
TGCTTAGTCT CTCTAAGCTT CGGTTTCCTA ATCTATGAGG AGGGCCTAAG ATATCACCAC      240
CCATCACTCG AG                    252
```

## (2) INFORMATION FOR SEQ ID NO:405:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAGAATACGA | AATTGAGAG  | GATGAATTG  | ACCTTTAATA | 60  |
| TTGTGGGACT | TTGTATTGGA | TATCTTTCCT | CCATCACTTC | AAAATCGTCT | TGCTTGGCCT | 120 |
| CTTATTGCAA | CCACAGCTGC | AGTAGACAGT | TCCATACAAG | CTTCCAAGAA | CTTCATGGGT | 180 |
| ACATCTGGAG | AGCACCTCAC | CTGGGGCCAC | ATTCTCTACC | TTTCTGTCT  | TACTCTTCCT | 240 |
| CCTCTGGGCT | TCTTCTGGT  | GCATGGGGGT | GGGGGGAGAT | ATTAAGTATT | CCCCAACAGC | 300 |
| TCGAG      |            |            |            |            |            | 305 |

(2) INFORMATION FOR SEQ ID NO:406:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACACAGCAAC | AACCAACATA | GCTAATACAG | AAAGCAGTCA | 60  |
| GCAGACTCTA | CAGAATTCCT | AGTTTCTTTT | AACAAGGTTG | AATGATCCTA | AAATGTCTGA | 120 |
| AACGGAGCGC | CAGTCCATGG | AAAGCGAGCG | TGCAGACCGC | AGCCTGTTTG | TCCAAGAGCT | 180 |
| CCTTCTGTCC | ACTTTAGTGC | GTGAAGAGAG | CTCATCCTCA | GATGAGGATG | ATCGGGGGGA | 240 |
| GGTTCTCGAG |            |            |            |            |            | 250 |

(2) INFORMATION FOR SEQ ID NO:407:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 481 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAAAGAAACT | AGGTGTGATT | GGAAGGAAGA | ATCATGAAAG | 60  |
| ATCAGGGTAG | ATACTGGTGG | GGCAGCTATT | AAAGGAGTTT | GAGCAGGGGC | ATGACATCTT | 120 |
| CACATTGAAA | GCAATATGGG | AGTCGAATTA | AATTTAGTAC | CCAGTTGAGA | TAAAAGTCCA | 180 |
| TTGCCATATT | CACAGTGAGG | TGGGACAAAA | GCAGAGTCAG | AGAGATTAAG | AGGCTGGGAA | 240 |
| AGATTGAAGT | GATTTTTAGG | AATCAGAATC | CACATCAGTT | GATGACAAGT | ACAGAAGGGC | 300 |
| ACAATAGCAA | GAAGAAGAAG | TAAATGATAA | TTCCTAGATG | CCATTAGTCA | CAATCAAGTA | 360 |
| CGGAAGAGAC | ATTATTGACT | GAGGTTGAAT | CAGGGCAGAG | AAGATAATAT | ACCTGATTTT | 420 |
| GGAAGTGTTG | CATGTAAGGG | GGCTTCGATT | TCAGCTACTT | ACATACTTGG | GAAGTCTCGA | 480 |
| G          |            |            |            |            |            | 481 |

(2) INFORMATION FOR SEQ ID NO:408:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

|            |            |            |             |            |             |     |
|------------|------------|------------|-------------|------------|-------------|-----|
| GAATTCGGCT | TCATGGCCTA | CCCGGCAATT | GGCTGATCCG  | CAGAAACATT | TCTGGGCTTC  | 60  |
| TTTCCATAT  | CTCTGGAAC  | GATAGTCAAA | CGTTAACTCT  | GAGCCTGAAG | GAACCAAGTTT | 120 |
| GGTGGTAAAA | AACCCAACCC | TCAGTTGTCC | GTTACACAGTC | CATTTTGGG  | TTTCACAATT  | 180 |
| TGGTTCACAG | CTGTGATTCA | TGAAACGAGA | GCAATTTTCCT | TTTTCAGTGG | CATCTATTAT  | 240 |
| CTCATCATTC | TTCAGGGCCA | TGAAATAGTA | ATGGATGTTT  | TGTTTCGTG  | CATACTCCTT  | 300 |
| CACTCGAG   |            |            |             |            |             | 308 |

(2) INFORMATION FOR SEQ ID NO:409:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 337 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACAATGAGGA | TAATACAAAA | GAGCAATCTG | CCCCACTGTG  | 60  |
| AGCCTGAGCT | TCCCATACTG | ACTTCTCTCT | CTCCAGAGGG | ATCCACTCCT | ACCAAGTCTGG | 120 |
| AAAGCACTGG | GCATACAAGC | GCACAAATGC | GTGGCACATA | CTACAAATCC | TTCTAAAGCC  | 180 |
| ACTGCTGTAC | ACCTGCCTCA | CTTAACCATG | CAGCCTCAAG | GCTGTCTCAT | GTCATTCTTT  | 240 |
| CCTACAGCTG | CAGAGTTTTC | AACATATGGA | CAGGTGTGCC | AGGATTATT  | TGACTAGTCT  | 300 |
| CTTACTGATC | TAGTCACCT  | CCTAAATACA | ACTCGAG    |            |             | 337 |

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 315 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAAATGTGGG | GATTGGGAAC | CACTAGTTCT | TTCAGATGGT | 60  |
| ATTCTTCAGA | CTATAGAAGG | AGCTTCCAGT | TGAATTCACC | AGTGGACAAA | ATGAGGAAAA | 120 |
| CAGGTGAACA | AGCTTTTCT  | GTATTACAT  | ACAAAGTCAG | ATCAGTTATG | GGACAATAGT | 180 |
| ATTGAATAGA | TTTCAGCTTT | ATGCTGGAGT | AACTGGCATG | TGAGCAAACT | GTGTGGCGT  | 240 |
| GGGGGTGGAG | GGGTGAGGTG | GGCGCTAAGC | CTTTTTTTAA | GATTTTTCAG | GTACCCCTCA | 300 |
| CTAAAGGCAC | TCGAG      |            |            |            |            | 315 |

(2) INFORMATION FOR SEQ ID NO:411:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 277 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

```

GAATTCGGCC TTCATGGCCT ACCTGAACCC CTTACTTCGA AGGATCATAA GATTCACAGG      60
GGTGTTTGCA TTTGGACTTT TTGCTACTGA CATTTTGTGA AACGCCGGAC AAGTGGTCAC      120
TGGGCACTTA ACGCCATACT TCCTGACTGT GTGCAAGCCA AACTACACCA GTGCAGACTG      180
CCAAGCGCAC CACCACTTTA TAAACAATGG GAACATTGT ACTGGGGACC TGGAGTGAT       240
AGAAAAGGCT CGGAGATCCT TTCCCTCCAA ACTCGAG                               277

```

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

```

GAATTCGGCC TCATGGCCTA GTGGTAGGGC TGAATTCGCA CTATAGGGTT AGATTTTCTA      60
CTGTAGGGTT AGATTTTTTT AATGGTGTGT ATATAATAAT ATAATATTA TAATAATCGG      120
AGAGGGTCAA AGAGGAGGGA AACTGGGTAA CCCAAAAACA TAAGGTCGAG GTCCCTGTTC      180
TTCACCGGAA AGAGGGTCAA GGACCAAAGC CATAGATTG ACTGGTAGT TAGTTAGTC       240
CTGTCTACGA AGAAGAAGAG CGGTTGTTG TTTTAACAGA TTCAAGAGCA GGAAGCACTC      300
ATTAGATAA CTCGAG                               316

```

(2) INFORMATION FOR SEQ ID NO:413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

```

GAATTCTAGA CCTGCCTCGA GTCAGGCTTT TAAAAACAAT CTCATCTGTC CCTCTAAAAA      60
TTAGCTTCCT TTAGAACCTC TTCTCCTTGG CAATATATTA GTGATACTAT TGTTATCTTC      120
ACACTAAAGA TTCAAACTT TAGTTTTTGT TTTAGGAAAG TTTTATTT TTACATTTCT      180
TTCATCCTTC ATAATTACCC AGTCATCATG AACTTTGTAG TTATCTATTT CTCATAGGA      240
ATCCTCGAG                               249

```

(2) INFORMATION FOR SEQ ID NO:414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

|   |     |
|---|-----|
| GAATTGATAC TAGGGACCGA AGGGAACATA GAGACTCCAG AGACATGCGG GACTCAAGGG | 60  |
| AGATGAGAGA TTATAGCAGA GATACCAAAG AGAGCCGTGA TCCCAGAGAT TCTCGGTCCA | 120 |
| CTCGTGATGC CCATGACTAC AGGGACCGTG AAGGTCGAGA TACTCATCGA AAGGAGGATA | 180 |
| CATATCCAGA AGAATCCCGG AGTTATGGCC GAAACCATTG GAGAGAAGAA AGTTCTCGTA | 240 |
| CGGAAATAAG GAATGAGTCC AGAAATGAGT CTCGAAGTGA AATTAGAAAT GACCGAATGG | 300 |
| GCCGAAGTAG GGGGAGGGTT CCTGAGTTAC CTGAAAAGGG TAGGCTCGAG            | 350 |

## (2) INFORMATION FOR SEQ ID NO:415:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 529 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCGT TAAACTGTG CCTAACAGAG GTGTCCTCTG ACTTTTCTTC  | 60  |
| TGCAAGCTCC ATGTTTTCAC ATCTTCCCTT TGACTGTGTC CTGCTGCTGC TGCTGCTACT | 120 |
| ACTTACAAGG TCCTCAGAAG TGAATACAG AGCGGAGGTC GGTGAGAATG CCTATCTGCC  | 180 |
| CTGCTTCTAC ACCCCAGCCG CCCAGGGAA CCTCGTGCCC GTCTGCTGGG GCAAGGAGGC  | 240 |
| CTGTCCTGTG TTTGAATGTG GCAACGTGGT GCTCAGGACT GATGAAAGGG ATGTGAATTA | 300 |
| TTGGACATCC AGATACTGGC TAAATGGGGA TTTCCGCAAA GGAGATGTGT CCCTGACCAT | 360 |
| AGAGAATGTG ACTCTAGCAG ACAGTGGGAT CTAATGCTGC CGGATCCAAA TCCCAGGCAT | 420 |
| AATGAATGAT GAAAAATTTA ACCTGAAGTT GGTCAACAAA CCAGCCAAGG TCACCCCTGC | 480 |
| ACCGACTCTG CAGAGAGACT TCACTGCAGC CTTTCCAAGG ATGCTCGAG             | 529 |

## (2) INFORMATION FOR SEQ ID NO:416:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 363 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACTGAGCCTA GTAATTCAAG GCTGCAGTGA GCTGCGATCA | 60  |
| CATCACTGCA TTCCCGCCTG GGCAACAGAA GTAGACTCCA TCTCTAAAAA GAAGGAAAGA | 120 |
| AAAAAAGGAA GAAATATACA GTAATTTTAA ACTGGGAGAT GAAATGCTAA TTTCTAGAAG | 180 |
| TCCATTTGGT TTTGAAGGGT CTCATGTCAA AAAAAAAAAA AAGTAAGTAA AATAAGACCC | 240 |
| ATCCTACTGT TTTATATACT AAAATAGTAA GTTAATTAAA TGAAAATGAA GTACATTGG  | 300 |
| GCTTTCATTT ACCAATCCTG GAATGTTGAA AAGTTGCCCA AAAGACATTT AGCAAGACTC | 360 |
| GAG   | 363 |

## (2) INFORMATION FOR SEQ ID NO:417:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 129 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

```
GAATTCGGCC TTCATGGCCT ACCTGAAAGC CCATCTCCTC CAACTTGCAG CGCCGGTAGA    60
GCTCGTAGTG CCGGCTGTGG GTCTGCTCGC GGAGGTCTTC CATGTTCAAC CGGATCAACC    120
TGCCTCGAG                                     129
```

(2) INFORMATION FOR SEQ ID NO:418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

```
GAATTCGGCC TTCATGGCCT AGGAGGTGGG TATAGGGAAC ACTTGGGGAG AAATAGTGAA    60
ATCTGAATAT AGACTGTGCA TTGTATCATT TAGTATAAAT GTTGACTTGC CTGATTTTGT    120
TGTGAAGGC ACTGTGGTTA CACAAGAGAA CGTCTGTCTT CCTAAGTGAT GCATGCCAAG    180
GTTGCAGGG GCATCCTGTC TGCAATTACT CTCAAATAGA TCAAATAAT AATAACGTGT    240
GTGTGCATGA TGGAGACAGG GAAGAAGAAA GGAAAGGGCT CGAG                     284
```

(2) INFORMATION FOR SEQ ID NO:419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

```
GCCAGCACAT TGTGGAACAG AAAAATGGCA AAGAAAGAGT GCCCATCCTC TGGCATTTC    60
TGCAGAAGGA AGCAGAGCTG AGGCTGGTAA AGTTCCTGCC TGAGATTTTG GCCTTGCAAA    120
GGGATCTAGT GAAGCAGTTC CAGAACGTCC AGCAAGTTGA ATACAGCTCC ATCAGAGGCT    180
TCCTCAGCAA GCACAGCTCA GATGGGTGTA GGCAGCTGCT TCACAACAGG ATCAGAGTCT    240
TTCTGTCCAC ATGGAACAAA CTGAGGAGAT CGCTTGAGAC GAACAGCTCG AG           292
```

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

```
GGAACCAACA GAACAACCTG TGAGGAAGAA CAAATGGCC TCTAATATCT TTGGGACACC    60
TGAAGAAAAT CAAGCTTCTT GGGCCAAGTC AGCAGGTGCC AAGTCTAGTG GTGGCAGGGA    120
```

|   |     |
|---|-----|
| AGACTTGGAG TCATCTGGAC TGCAGAGAAG GAACTCCTCT GAAGCAAGCT CCGGAGACTT | 180 |
| CTTAGATCTG AAGGGAGAAG GTGATATTCA TGAAAATGTG GACACAGACT TGCCAGGCAG | 240 |
| CCTGGGGCAG AGTGAAGAGA AGCCCGTGCC TGCTGCGCCT GTGCCCAGCC CGGTGGCGCT | 300 |
| CGAG  | 304 |

## (2) INFORMATION FOR SEQ ID NO:421:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

|  |     |
|--|-----|
| TAATTTAGAT TATACAGAAC TTGGCCTGCA GAAACTGAAG GAGTCTGGAA AGCAGCACGG  | 60  |
| CTTTGCCCTCT TTCTCTGATT ATTATTATAA GTGGTCCTCG GCGGATTCCT GTAACATGAG | 120 |
| TGGATTGATT ACCATCGTGG TACTCCTTGG GATCGCCTTT GTAGTCTATA AGCTGTTCCT  | 180 |
| GAGTGACGGG CAGTATTCTC CTCCACCGTA CTCTGAGTAT CCTCCATTTT CCCACCGTTA  | 240 |
| CCAGAGACAA CTCGAG  | 256 |

## (2) INFORMATION FOR SEQ ID NO:422:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 216 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

|  |     |
|--|-----|
| GCGATTGAAA TGGATCCTCC AGCTCTTCCA CCAAAGCCAC CTAAGCCAAT GACTTCAGCA  | 60  |
| GTTCCAAATG GAATGAAGGA CAGTTCTGTT TCTCTTCAGG ATGCAGAAATG GTACTGGGGG | 120 |
| GATATTTCAA GGGAGGAGGT AAATGACAAA TTGCGGGATA TGCCAGATGG GACCTTCTTG  | 180 |
| GTCCGAGATG CCTCAACAAA AATGCAGAGA CTCGAG                            | 216 |

## (2) INFORMATION FOR SEQ ID NO:423:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 389 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AAAATTAATG AGTTGAACCT GTGACCACTG CATTCAGAA  | 60  |
| GAGTCACCCA AGAGAGAGGT GGGGAGTCGA ACAGAGCTCC TTACTTTTCT CCCACAGAGG | 120 |
| AAAAGGTGGA ATTCTGGGCT GGCTTTCCCT CACCAGAGGG TATCCCAAAT CTATGACAAA | 180 |
| AGAAAAATGC CAGTCTCTTT TGGAAAGTAG GGAATGCCCT AGTGATGCTG TATGAAGAAG | 240 |
| CAAGCCTCCA TCTTCCCGG GGAAATTGA AACCAAGATG GGGTCCTGTC AATGACCCTC   | 300 |
| TAGCATTTAT TGAGTGCCTA TTAGACAGGT GGCCTTGGGC TTTGAAATGC AATATCTTAT | 360 |
| TTAACTTAAT TCTGAGAAGC TATCTCGAG                                   | 389 |

## (2) INFORMATION FOR SEQ ID NO:424:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 411 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

```

GCCCCGTGCTG ATGTCTTTGA AAGAAGGCTA TAAGAAGTCC TCAAAAATGG TATTTAAGGC      60
TCCCATCAAA GAAAAGAAGA GTGTTGTGGT CAACGGAATA GATTTATTAG AAAATGTCCC      120
ACCCAGGACA GAGAATGAGC TCCTTCGAAT GTTCTTCCGG CAGCAGGATG AGATTCGACG      180
GTTGAAAGAG GAGCTGGCCC AGAAGGACAT CCGCATTCGG CAGCTCCAGC TGGAACTGAA      240
AAACTTGCGC AACAGCCCCA AGAACTGTTA GCTCCCCAGC TGGGCTGTTT TCTAAGCCGA      300
TCTCTCCGTC GTTCTACTC ATCCCTTAAC TTCTCCCTTA CCAAGTACCC CAGAGACAGA      360
GCCAGGACAG GAGTGGGGGC CAGCCTGAGG ACCCCCGCCT ACCACCTCGA G      411

```

## (2) INFORMATION FOR SEQ ID NO:425:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 691 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

```

GGTACCAACA GGACACCCCG GTGGCCCCCC GCTTTGACGT CAATGCCCCG GACCTCTACA      60
TTCCAGCAAT GGCTTTCATC ACCTACGTTT TGGTGGCTGG TCTTGCGCTG GGGACCCAGG      120
ATAGGTTCTC CCCAGACCTC CTGGGGCTGC AAGCGAGCTC AGCCCTGGCC TGGCTGACCC      180
TGGAGGTGCT GGCCATCCTG CTCAGCCTCT ATCTGGTCAC TGTCAACACC GACCTCACCA      240
CCATCGACCT GGTGGCCTTC TTGGGCTACA AATATGTCGG GATGATTGGC GGGGTCCCTCA      300
TGGGCTGCT CTTCGGGAAG ATTGGCTACT ACCTGGTGCT GGGCTGGTGC TGCCTGGCCA      360
TCTTTGTGTT CATGATCCGG ACGTGCGGC TGAAGATCTT GGCAGACGCA GCAGCTGAGG      420
GGGTCCCGGT GCGTGGGGCC CGGAACCAGC TGCGCATGTA CCTGACCATG GCGGTGGCGG      480
CGGCGCAGCC TATGCTCATG TACTGGCTCA CCTTCCACCT GGTGCGGTGA GCGCGCCCGC      540
TGAACCTCCC GCTGCTGCTG CTGCTGCTGG GGGCCACTGT GGCCGCCGAA CTNATCTCCT      600
GCCTGCAGGC CCCAAGGTCC ACCCTGTCTG GCCACAGGCA CCGCCTCCAT CCCATGTCCC      660
GCCCAGCCCC GCCCCAACCC CAAGGCTCGA G      691

```

## (2) INFORMATION FOR SEQ ID NO:426:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```

GCAGACCATA TATCGAAAGT TCTTTACTTG TATCAAGGTG AGAAAAAATT AGAAGAGATA      60
TTACCTCTGG GACCAAACAA AGCTCTTTT TATAAAGGAA TGGCATCATA TCTTTTACCA      120

```

|   |     |
|---|-----|
| GGACAAAAAT CTCCATGGTT TTTCCAAAAA CCCAAAGGTG TAATAACTTT GGACAAACAA | 180 |
| GTAATATCCA CGAGTTCAGA CGCCGAATCC AGGGAAGAAG TTCCCATGTG TTCAGATGCT | 240 |
| GAATCCAGGC AAGAAGTTCC CATGTGTACA GGCCCTGAAT CCAGGCGAGA AGTTCCTCGT | 300 |
| TATACAGATT CTGAACCTGA G   | 321 |

## (2) INFORMATION FOR SEQ ID NO:427:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 190 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT ATATACTATC AAATGAAAAT AGCAAGATGC TACCATTAT | 60  |
| ATTAAAAAGA GGACAAATA TTAATATATT CATGGTTGCT TGTCTATGTG GAATATTTCT | 120 |
| GGATATATAC ATAAGAAGTT ACATTGGTTA CCTATGGGCA GGTACTACT GGGTGGCAGG | 180 |
| TGGGCTCGAG   | 190 |

## (2) INFORMATION FOR SEQ ID NO:428:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 670 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGGCAAAGCT GGCCCTGACG CCTGGGTTTC TTGGCCCCAG | 60  |
| CTGCCCAGCA GGTGCCTCGA TTCCCTGCCC TTGTGACCTC CCAGGAACA GAAGTATCT   | 120 |
| GGGACACTAT GTCACCTCTC CTCTCATCTG GGGTCAGTCA GGGTTCGGGG GCTGCAGCAG | 180 |
| CCAAGCGCAT GAGAGGTGTT TCCTTGGCCT TCCAGAAGGC CCACTGTGGA GCCAGCCTCC | 240 |
| CTATGGGAGG CAGAGCGGCA AGGACAGGGC TTGGAATCA GCCAGGTCGG CTCCTGGGCT  | 300 |
| GTGGCCGTGG AGAAACACTG CCCCAGGAT GACACAGGCA AGAGCCCCCTG AGGCATGGGA | 360 |
| GGCCCAGGGA AGACCATGGG CTGTAGGGGA GAGTGTGGCA GGTGACCCAA AGGCCCAAAG | 420 |
| AGGGCCGTGG GGCCTGAGGA GGTGATAATC TCTTCTGAGT GGGGGCAGGT CGATTCTTGC | 480 |
| ACAAGGTGGG CTCTTCACTG AGCCATAAGG GACAGGGAGG TATGGGAGAG CGCTGGGGGC | 540 |
| CCATCCCCCT GTCCACCCAG TGTCCACTGG CCTGTCCTTC AGGGAGCAGA GCAGAGCAGG | 600 |
| TGGTGGACGG GCCCAGTGCT GGGTGTTC ACCACCATCC CCCCATCCCC CATCTAAGTC   | 660 |
| GCTCCTCGAG  | 670 |

## (2) INFORMATION FOR SEQ ID NO:429:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 278 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

|  |     |
|--|-----|
| GTAAGGATTG GCGATTCCCTA CAGCGAATGA TCACCGCTCC CTGCATCCTC TTCCTGTTTT | 60  |
| ATGGCTGGCC TGGTTTGTTT CTGGAGTCCG CACGGTGGCT GATAGTGAAG CGGCAGATTG  | 120 |
| AGGAGGCTCA GTCTGTGCTG AGGATCCTGG CTGAGCCAAA CCGGCCCAT GGGCAGATGC   | 180 |
| TGGGGGAGGA GGGCCAGGAG GCCCTGCAGG ACCTGGAGAA TACCTGCCCT CTCCTGCAA   | 240 |
| CATCCTCCTT TTCCTTGCT TCCCTCCCA ACCTCGAG                            | 278 |

## (2) INFORMATION FOR SEQ ID NO:430:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCTGTTTCATC TTTAAATGCT | 60  |
| GTTTCTCTG TTCAAAATGC CCTTTCCTAC CTTATCTACT TGTGCCACTG CATATTCCTA   | 120 |
| AGGCTCAACT CAGGGTATCT TCCCTCGGAA ACCTTGCTCTG ATCATCCTGG CCCCTCTGGC | 180 |
| GGACAGTAAT TTCTGCCTCT GTGCTCCCAT CACCTGAGCA CACCTGTATG GTGCTGCTGA  | 240 |
| GCCCGCTGAA TTGGCATTAT GGGCAGTGC GTCTCCTCCA TTCCATGGAG CTCCTCGAG    | 299 |

## (2) INFORMATION FOR SEQ ID NO:431:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

|   |     |
|---|-----|
| GTTACATGAC ACTGTTAATG ATTGCATTG GCTTGCTGTG GGGGCATCTC TTGCGGATCA  | 60  |
| AACCCACGCA GAGCGTCTTC ATTTCCACGT GTCTGTCTT GTCAAGCACA CCCCTCGTGT  | 120 |
| CCAGGTTCTT CATGGGCAGT GCTCGGGGTG ACAAGAAGG CGACATTGAC TACAGCACCG  | 180 |
| TGCTCCTCGG CATGCTGGTG ACGCAGGACG TGCAGCTCGG GCTCTTCATG GCCGTCATGC | 240 |
| CGACTCTCAT ACAGGCGGGC GCCAGTGCAT CTTCTAGCAT TGTCGTGGAA GTTCTCCGAA | 300 |
| TCCTGGTTTT GATTGGTCAG ATTCTTTTTT CACTAGCGGC GGCTCTCGAG            | 350 |

## (2) INFORMATION FOR SEQ ID NO:432:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACCAGGTTCT TGCTGCCCTG CGACTCCAGT ATCTGCAGGG | 60  |
| GGATTATACT CTGCACGCTG CCATCCCACC TCTCGAAGAG GTTTATTCCC TGCAGAGACT | 120 |
| CAAGGCCCCG ATCAGCCAGT CAACCAAAC CTTACCCCT TGTGAACGGC TGGAGAAGAG   | 180 |
| GCGGACGAGC TTCCTAGAGG GGACCCTGAG GCGGAGCTTC CGGACAGGAT CCGTGGTCCG | 240 |

GCAGAAGGTC GAGGAGGAGC AGATGCTGGA CATGTGGATT AAGGAAGAAG TCTCCTCTGC 300  
TCGAG 305

## (2) INFORMATION FOR SEQ ID NO:433:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 273 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

GAATTCGGCC TCATGGCCTA CTCCTCAGCC CCTCATCTTG CCTCCACCCA GCTGCTCCAT 60  
TTTTGCCACA TCGTGGCCCG CAGCCCCAGA GTCACGTGCC ATGTCACCAT CCTCCTCCTC 120  
CTTTGGAATC CTCTCCGCAC ACTGTGGCCC TTGTCTCAGG GCCCACAAGC TGAAGTGTGG 180  
CATAGCTCTC TCTTCTTCTC CAAGAAGACT CAGCAGCCTA CATTCCCATT CCTGGTATGT 240  
GCCATTGGGT TGGATGTCCC CACTTATCTC GAG 273

## (2) INFORMATION FOR SEQ ID NO:434:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 324 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

CGAGTGAGCG GCGGGACAG TGCTTGTGAA ACTGAACACA ACAAAGTAT GGATATGGGA 60  
AACCAACATC CTTCTATTAG TAGGCTTCAG GAAATCCAAA AGGAAGTAAA AAGTGTAGAA 120  
CAGCAAGTTA TCGGCTTCAG TGGTCTGTCA GATGACAAGA ATTACAAGAA ACTGGAGAGG 180  
ATTCTAACAA AACAGCTTTT TGAAATAGAC TCTGTAGATA CTGAAGGAAA AGGAGATATT 240  
CAGCAAGCTA GGAAGCGGGC AGCACAGGAG ACAGAACGTC TTCTCAAAGA GTTGGAGCAG 300  
AATGCAAACT ACCCACACCT CGAG 324

## (2) INFORMATION FOR SEQ ID NO:435:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 548 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

GAATTCGGCC TTCATGGCCT AAATGATCAA ATTTGGGCTT ACATATTTTG CAACAGTGGT 60  
ATAACACAAA GAAGTAAGCA AATATGGCAG AAGTGTGGTG GCTTTGGCGT CTACTTTTGA 120  
CCATAGTGGT GGCCCTGTTA TTCGTGGCTC CCGGGGTTCC TACACATCCT TCCCGATGGA 180  
AGAAGGGGTT GGCCAAAAG GTCAGCCAGC TGATGGGTTG GACCAAGAAA GACAGAGTGA 240  
TAAGAATGAG TGACACCATG TTCTATCATT TTGTATTAGA TGCACCAAAA AACTATTCTG 300  
TTATTGTGAT GCTTACTGCT GCTCTCCACG CGTTCAGTTC ATGTGTCATG TGCAAAGGTG 360  
CTGCTGAAGA ATTTGAGATC TTGGCAAATT CCTATCAACG CCCTGGTGCA TTCACCACAA 420

AGGTATTTTT TGCAATGGTG GATTATGATG AAAGCCCTGA GGTCTTTGAA GCGCTCCAGG 480  
 TAACGTGAGT TCCGAGTTTC TTCCACTTTT CTGCCCAATG GAAATTTACA ACAGATGACA 540  
 GTCTCGAG 548

## (2) INFORMATION FOR SEQ ID NO:436:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 308 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

GAATTCGGCC TTCATGGCCT AAAATGAAAT TCAGACAAAA TCACTGGCAC CAAAAATGGT 60  
 TTATTCTGAG CTGTCTTCAC TTGACTATT TGGGGGGCTT CTCTCAAGTA CAGATGTGGG 120  
 TGGGGTCCC CTGGAGCAGG CAGGATTGGC AGTAAGAGAT ATTGGCCACT CAAGCTTACT 180  
 GTGTGTGTGT GCCTCTGGAA GAGTGAAGAA TGGACTTCAA AAGTAACATC AAAAATCTAA 240  
 CTGCCACCAT CCTGGAGACA TTTGCAGGG CTTTCCTTC AAGTCTTCA AGTACAGGAC 300  
 ATCTCGAG 308

## (2) INFORMATION FOR SEQ ID NO:437:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 420 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

GAACAGAAGA GATCCCCTCG GCCCCCAGCG CATATGACCA AAGTCACACC AGGTTTCAGAG 60  
 CTGCCCCACTC CCAATGGAAC CACCTTATCA TCTAACCTCA CTGGTGGCAT GCCCTTCATT 120  
 GATGTGCCCA CTCCCATCTC CTCTGCAAGT TCAGAAGCTG CCTCAGCAGT GGTCAGTCCC 180  
 TCTACAGACA GTGGCCTGGA ATTCTCCTCC CAAACCACTT CCAAGGAAGA CCTTACTGAT 240  
 CTAGAGCAAC CTGGCTCTCC AGGGTACAGC ACAGCTACAG AGCCTGGAAG CAGTGAGCTA 300  
 GGTGTTCCCG AGCAGCCTGA CCTCCAGGAA GGGACCCATG TGGAAAAGTC CCAGTCAGCA 360  
 TCTGTGGAGT CCATCCCTGA AGTGTTAGAG GAGTGCACGT CCCCTGCCGA CCAACTCGAG 420

## (2) INFORMATION FOR SEQ ID NO:438:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 279 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCT TCTCACTGCA CCTGGATGGC 60  
 AACGTGCTGG ACCACTTCTC GGAGCTGCGC AGCGTCGAGG GGCTGCAGGA GGGCTCTGTG 120  
 CTGCGTGTGG TGGAGAGGCC GTACACGGTG CGTGAGGCCC GCATCCACGT GCGCCATGTC 180  
 CGAGACCTGC TCAAGAGCCT GGACCCATCC GATGCCTTCA ACGGGGTTGA CTGCAACTCC 240

TTGTCCTTCC TGAGTGTCTT CACCGACGGC GACCTCGAG

279

## (2) INFORMATION FOR SEQ ID NO:439:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCA CCCAGCCTTC TTCTTTTCAT      60
TATAACCTTT ATACCACAGT AAGCTGTTGC ATCATTCAAA TGACTCTGCA TCCTATATTG      120
AATATTCTCC ATTATTCTCT AATATCTTTG GGGGTACCCA GGATTACAGG GTTCTGGGCA      180
TACATGTTAA TGCTTTTGCC AGGACTTTTC TTTTATTCA TTGTCGTGAC CCATTGTCTT      240
TGCTTATATT TAAAGTTTTT GCTCTTGATA TCATTGGTTC TTTCTTAAGT CACTTTTCTT      300
GGTAACTGCT TTGGAATGAA TCATACATAT CTCACTTACG GAGCTCTCGA G              351

```

## (2) INFORMATION FOR SEQ ID NO:440:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

```

GAATTCGGCC TTCATGGCCT ACCAATACTC ATAATTAAAA GTTTTTCGTT GTCAAAACAT      60
TTTCACAGTT CAGGAATCAC AGTCCTATTT CATCTTTTGA AATAAAAGTT AAAGTCCATT      120
TTTCTTAAGC CTTATTATAC CATTATCCAA AAACACTACC TAGCATTCAT CTTAGTTTTT      180
CATATCTCCT TAGCAGATAG TTTAGTATAT TCCATTTGTC TTATTGAGG TTTAAAAAAA      240
GTTGTGGAAG AAGTTTCTCA GGAGTTCAGC AAGCCTTTCC ATCTATCTTC TATTTTAAAA      300
GAATGTGATT TATTGTTTTT ATGAATAAAA TATACCTCGT GTGTTTCTCA TATGATGTTT      360
CATTACATTA ATCATCCATT AAGTAAATGT TTTTGTGCTG CAAAAACTCG AG              412

```

## (2) INFORMATION FOR SEQ ID NO:441:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

```

GAATTCGGCC TTCATGCCTA GCCAGGAGGA GGAGGACCCT ATGAACAAAC TCAAGGGCCA      60
GAAGATCGTG TCCTGCCGCA TCTGCAAGGG CGACCACTGG ACCACCCGCT GCCCCTACAA      120
GGATACGCTG GGGCCCATGC AGAAGGAGCT GGCCGAGCAG CTGGGCCTGT CTACTGGCGA      180
GAAGGAGAAG CTGCCGGGAG AGCTAGAGCC GGTGCAGGCC ACGCAGAACA AGACAGGGAA      240
GTATGTGCCG CCGAGCCTGC GCGACGGGGC CAGCCGCCGC GGGGAACCTG AG              292

```

## (2) INFORMATION FOR SEQ ID NO:442:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 222 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

```
GAATTCGGCC TTCATGGCCT ACCGCCTCGC TGCCTGGACA CCTGTCCGTG CCACCCCTGGT    60
CACTGAGCAG GACATCCGCG TCTGTGGCCC CTGGGACCCT GCCCCCGACA GCCAGGCCTG    120
GGTTTGTCTT TTAGGTAGA GTGCCTGGTC CAGGTCATTG GAGGAGAGTC CACATGGCCA    180
CCTCTGGCGT GTTCTAGAGA GGCCCTCCCG TCTAGGCTCG AG                      222
```

## (2) INFORMATION FOR SEQ ID NO:443:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 205 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

```
CTTTATGACA GCCATGAGCT TTTTCCGGTG CATTGCAATT GTTTTCCAG TCCAGAACAT    60
TAATTTGGTT ACACAGAAAA AAGCCAGGTT TGTGTGTGTA GGTATTGGA TTTTGTGAT    120
TTTGACCACT TCTCCATTTC TAATGGCCAA ACCACAAAAA GATGAGAAAA ATAATACCAA    180
GTGCTTTGAG CCCCCACTAC TCGAG                                         205
```

## (2) INFORMATION FOR SEQ ID NO:444:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 178 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

```
GAATTCGGCC TTCATGGCCT ACCTGCCTCC CTCCTTGCTT CTTGCTCTGC TAACTCAACT    60
CTGCCTTCCT CTTTTCATT CTTCTACTCT GCCCTATATG GAGGACAAAT GGACACCAGG    120
GGTGCTAACC TTATTGGTGC CTGCCCCAGC CTACCCAGG TGCAAGCAGA CTCTCGAG      178
```

## (2) INFORMATION FOR SEQ ID NO:445:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 251 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

```

GAATTCGGCC TTCATGGCCT AGAAAGCCAC AAACCTTTTA GTTTTAACT TCAAAGGCTT      60
CTTTCTCTTT AAAAAAAATT ATTTTAAATA TAGAGTCAAA AAATTGGATG TATTATTTTG      120
AGCTTCTAAT TGCTGCCACT TGGAGATGTC CAAGTAAGAA GGCCTTCTTT TTACATGGGA      180
TGAATTGTGC ACTTCTACTG ATGATGACTA CAGCAGAAGT GATGTTATAC GTACAGGCAC      240
TTGAACTCGA G                                     251

```

## (2) INFORMATION FOR SEQ ID NO:446:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

```

GAATTCGGCC TTCATGGCCT AGGGCTTATA TTTTAACTGA ACTATTATTA AATAAAAAACA      60
AAATAAAATC TTATCATATA GGTGTAATCT GTTCTAAGGA AAAAATCCTT CTATCAAGAC      120
TAAACGTCTA ACTGAATACA GAATGACATT TCATGCCTTA AGGTCTCTGT CCATGTTGTT      180
CCTTCTTTCT ACTGTCCTTT ACTGTATTAG TTCAAACAT TCTAATTCAC TCTCCAAAAC      240
CCAATTCAAA CATCACCATC AGAAAGTCTT CCATGATGGG CCAGGTGTGG CGGCCCTCGA      300
G                                     301

```

## (2) INFORMATION FOR SEQ ID NO:447:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

```

GAATTCGGCC TTCATGGCCT AGCTGAAATG CTTTCTATTG GATACTATCT GGGCATATTA      60
CTTCCTGTGG TTCACTGTCT GGGTGACAGG ATTCATAGAA GCCCAAACCT TAGCACCACG      120
CAGCATACCC TTGTAACAAA GCCACTCGAG                                     150

```

## (2) INFORMATION FOR SEQ ID NO:448:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

```

GAATTCGGCC TTCATGGCCT AATTGATTT TATTAGGTTT AAATTGTATT TCTTCAAATT      60
TCATAAACTA TAGCATTAT CTCCATATTT TTAATAAATG ATCACAATAA AATCACTGTT      120
AATATCTCCA TTTACACTTT TACAACCTCT GCTATTGCTG GATTTTTCAT CCTATGATAT      180

```

GTTAAACCAA TTAAATAC ATTTAAAGAA TCACAGCTGT CTCGAG

226

(2) INFORMATION FOR SEQ ID NO:449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAGACTGGGG | GCATGTACCC | CACCTACTTT | CTGCACCTGG | 60  |
| ACCGTGAGGA | TGGGAAGAAG | GTAAGGTTGG | TCTGGGCATG | TTATCATCTA | GGCTTTACAG | 120 |
| CCCTTTGAAA | TCCTAGGGGC | TGAAATGTGA | CTGGAAGTCT | CATATCTACC | GCTGACCTCT | 180 |
| CAGTTCCTCA | AAGAACTGC  | CTTCGTGTCT | GGTCTGTGCA | CATCTTTGTG | TTTTCCAGTG | 240 |
| CATTTGTGTG | TGTGCACATA | TGTGCGTTTG | GGAGCTGACG | CAACGGAGAG | AGTCTGTGTG | 300 |
| AGTGGCTCTC | ATGACTGTGT | GCAGACCAGA | GGCTGAGTCT | GGAATATGAC | CTCATTCAC  | 360 |
| TCCCCAAGGT | GTTCTCTCTG | GCGGGAAGGA | AGAGAAAGAA | GAGTAAACT  | TCCAATTACC | 420 |
| TCATCTCTGT | GGACCCACA  | GACTTGCTC  | GAG        |            |            | 453 |

(2) INFORMATION FOR SEQ ID NO:450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAAAGCAAAT | TAAGTTGTTT | TGAAAAGAAA | GTATAGATTA | 60  |
| ATTTTGTGTT | CTGTTTAAAT | TTTATCTCCT | TGGTAAAGAT | TTTTTTTCC  | TGGGCAGAAA | 120 |
| ACTTGGCATT | TTTAGGCGTA | GATACCTTAC | CTTACAATGC | CAAAATGAAT | TTAATCCAG  | 180 |
| TACTCAGGTT | TTTCCCTTTA | ACAGACTCTA | TGTGTACCAG | GCATTGAATT | CTAGACCTGC | 240 |
| CTCGAG     |            |            |            |            |            | 246 |

(2) INFORMATION FOR SEQ ID NO:451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGTTTGGTGG | GGTTGAAGTT | GATGGCAAAC | TCATGGGAGA | 60  |
| CCTTCCAGTC | TGGGGGTAAC | TGGGCCCGA  | ATCCCAGAGC | TGGAACATC  | TTATCACTGT | 120 |
| CGTAGTCCTG | AATGATCTGC | CCAACAGCCC | AGATGGCCGA | CAGATATTCG | TTGGTGCCCA | 180 |
| TAGGGTTGAT | ATAGTGCAAA | GAGGAAGGGT | CGAGGGGATT | CCCGTTGGAG | GCTGTAAAGT | 240 |
| CTATTCCAAC | GGTGAACATG | AGCTGGCAGC | CTCCCAGGAT | GTAGTCAAGG | AAGGAGTAGT | 300 |
| CTCGGTTTAT | CTTGCAGGAT | CGCAGGATGA | TGATGCCCGA | GTTTTTATAG | TTCTTCTCT  | 360 |

TCCTCTGCTT CTGGGGTTG ATGCACTCGA ACTCCAGCGG GACGCTGTCT CGAG

414

## (2) INFORMATION FOR SEQ ID NO:452:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACACACTGAC TGACAGACCA CGGTATGCCT TGCACCACCC | 60  |
| TGGCTGCTGG GGTCCAAAGA GGGATCTGGT AGACCTGGGC TGAATCTCA GCTTCACCAT  | 120 |
| TTACCATCTG GGTGGCCAAT GGAGTGTAC TTGGCCTCTC TGAGCCTCGG TTTTGCTCGT  | 180 |
| CTCTGAAACA GTAAGATACC TCCCTTTGGC TGTGTGATG AGGATGAAGG TTAGCCTATG  | 240 |
| CCCAGTAGTA TGCCTGTCCC TTCATCGATG CCTGCTCATC TCACTCTTGC TCTGGAAACA | 300 |
| CCCCTAGTAG AGGCGCAGAG GGGCAGGGCC CACCCCACCC ACCAAAACGT GGTGCAGAAT | 360 |
| GAGGTGATCT CGAG   | 374 |

## (2) INFORMATION FOR SEQ ID NO:453:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

|   |     |
|---|-----|
| GGGTCCGTCC GCCGCCACCA CCCACTCCGG ACACAGAACA TCCAGTCATG GATAAAAATG | 60  |
| AGCTGGTTCA GAAGGCCAAA CTGGCCGAGC AGGCTGAGCG ATATGATGAC ATGGCAGCCT | 120 |
| GCATGAAGTC TGTAAGTGA CAAGGAGCTG AATTATCCAA TGAGGAGAGG AATCTTCTCT  | 180 |
| CAGTTGCTTA TAAAAATGTT GTAGGAGCCC GTAGGTCATC TTGGAGGGTC GTCTCAAGTA | 240 |
| TTGAACAAAA GACGGAAGGT GCTGAGAAAA AACAGCAGAT GGCTCGAG              | 288 |

## (2) INFORMATION FOR SEQ ID NO:454:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AAGAAGTGTG TCCTGTATCC ACCTCTTCCT GGCCTCCCTT | 60  |
| CCCCCACTTC CTGGTCCCTG TCCACTCCTC AGGTGGTGC TCTCACTTCT TGAAGCTCT   | 120 |
| AGGCACCCCC GCCTCCCGCC AGGCTCCCGG TTGGCTCCTG GCAGGCCAGC TGAGAATGAA | 180 |
| CAGGAGATGG AGGCAGGCAG CCCAGGCTGC AGAGGTGAGG GATGTGGGGC CAGGCCCAGA | 240 |
| GGGCTCAGCC TAGAGGCTTC CAATCTCAGA TTCTCCTGCC TGTGGTCATC TGTTTGTCCA | 300 |
| TCACCCAGG ACAGGGCAGA CAGAGGGGCA AAGCACTGGG GGCCCCAGAG CCTAGCTTCC  | 360 |
| CCTCAGCCTG GGGGAACTC GAG  | 383 |

## (2) INFORMATION FOR SEQ ID NO:455:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 409 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

```

AGAGCACGTC AATGCCATGA GGGGCCTGCA AAGCAGCAAG GAGCTCAAGG CTGAGCTGGA      60
CGGGGAGAAAG GGCCGGGACT CAGGGGAGGA GGCCCATGAC TATGAGGTGG ACATCAATGG      120
TTTAGAGATC CTTGAATGCA AATACAGGGT GGCAGTAACT GAGGTGATTG ATCTGAAAGC      180
TGAAATTAAG GCCTTAAAGG AGAAATATAA TAAATCTGTA GAAAACTACA CTGATGAGAA      240
GGCCAAGTAT GAGAGTAAAA TCCAGATGTA TGATGAGCAG GTGACAAGCC TTGAGAAGAC      300
CACCAAGGAG AGTGGTGAGA AGATGGCCCA CATGGAGAAG GAGTTGCAAA AGATGACCAG      360
CATAGCCAAC GAAATCACA GTACCCTTAA TACGGCCCAG AATCTCGAG      409

```

## (2) INFORMATION FOR SEQ ID NO:456:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

```

GAATTCGGCC TTCATGGCCT AAATTTTCATG AAAAACAAAT GGCTTAAACC CAGGGAAGCA      60
AGGATTATAA TTGATTTTTT TGAGCAATGT CTCTTTTGGT TACAAAGTAA AAGGTAAAT      120
AAAAGTTTAA AAGCATTTGG AAAGAATGTT CTTTGGTTTT TTCACTCAGT AACCTAAAGT      180
TTAATGACCC TTACAGTGC TGATAACAC TTAAATTTTT GCAGTAGGCA TTGCTAGTTC      240
AAATTGAAGG AAGGTTGCCA GGCTCATGCC TATAGTCCCA ACTACTTAGG AGGCTAAGGC      300
AGGGGGACGC CCTCGAG      317

```

## (2) INFORMATION FOR SEQ ID NO:457:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 510 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

```

GAATTCGGCT TCATGGCTA CTGCTCTTG GCTAAGGTGG CAGTGACCT CTAGATCAAC      60
CTGGGCAACA GTCACAAGGG AGTGTGACTT CTTGGCCATA ATAACTCAC TTGATAGTGT      120
TTATGTTATT AATCTGAATG CAACAGAAGA CAAAAGCACA GGCATGCACA CACACAGAAC      180
CCCAACCAC TAAAACTAC CTAACACTG ACTTAGTAAA TAGTAAAAAG GTAATGTTGG      240
GACTTTTAAA CCTTGAATCC ATTAGCCAGG CTTGGGATGA AAGGACCATC TAAATCATG      300
CTAGTCTAAA CCATGCTCTT CCACACAGCT GTTTAAAAAC CACTGGGTAT GAGGAATATG      360
CTAGAAAGAA ATGTTAAAAA TAGATTGTTG GCTCACACTT ATTTTCTAA TAAATAGGAC      420
CATTATTACT ACCAGGAAAG TCTTATTAT TTTGCCTGAA ATTGGCTTAA AGAAAGTCTC      480

```

ATGACGGGAT GGGATGGGCC GGCACCTCGAG

510

## (2) INFORMATION FOR SEQ ID NO:458:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGCGGAAACA | ACTGAACTA  | ATGGAAGATA | TGGATACAGT | 60  |
| AATTAAACCC | CGTCTCAAG  | TAGTAAACA  | AAAAAACAG  | CGACCAAAT  | CTATTCACAG | 120 |
| AGATCATATT | GAATCCCCCA | AAACACCAAT | AAAGGGTCCT | CCAGTCTCTA | GCCTTTCTTT | 180 |
| GGCATCGCTG | AACACGGGTG | ATAACGAGAG | TGTACATTCA | GGCAAGAGGA | CGCCAAGATC | 240 |
| AGAGTCTGTA | GAAGGCTTCT | TATCTCCAAG | TCGTTGTGGC | AGTCGAAATG | GAGAAAAAGA | 300 |
| CTGGGAGAAT | GCATCAACAA | CTTCTTCAGT | GGCTTCTGGA | ACAGAATATA | CAGGACCAAA | 360 |
| GCTCTACAAA | GAACACCTCG | AG         |            |            |            | 382 |

## (2) INFORMATION FOR SEQ ID NO:459:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACTGAGTCCC | AGGCCGGGGC | CCTGCCCCAG | CCAGGGCTGG | 60  |
| GACTCTGCAG | TTGGGAGCTT | GTCCAGCTGC | CCCCTCTAAT | GCTTTTCTCC | TCCAGGACAC | 120 |
| AGGGAGCCTC | CGGAAGCACA | GTAGTCCCCG | TGTGTCACCT | TAGGCTGACC | TCTGTCCCCA | 180 |
| GGGGTGACGT | AATGCTGTCA | CTGTCTTGAA | TTCTTCATCG | TTTAACAGGG | AGCCCACTGT | 240 |
| TTTCACCAAA | AGCAGAATTG | GATTTTTTTT | TTAAGTCGAT | AAATTTTAC  | TCAAGGAATT | 300 |
| CCATGTTGTG | ATTTCTTCCA | CTGTCCATCA | AGGTCACTTT | AGATCCTCTA | AAGAGCTAGA | 360 |
| GTCAAAAGAT | TTATCTTCAA | GTTAGTCCTT | TTTAATGAAA | CCGATGCCTA | TTTAATCCCA | 420 |
| GTCAGCCCTC | GAG        |            |            |            |            | 433 |

## (2) INFORMATION FOR SEQ ID NO:460:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

|            |            |             |            |            |            |     |
|------------|------------|-------------|------------|------------|------------|-----|
| GTCCGGCTAA | AGTAATCCAG | TCACCTGCTG  | CTGATACTAG | AAGGGCTGAG | ATGTCACAAA | 60  |
| CAAAATTTAC | CCCTGACACT | CTTGCCCCAGA | ATGAAGGGAA | GGCTATGTCT | TATCAGTGTA | 120 |
| GCCTTTGTAA | GTTTCTATCA | TCATCCTTTT  | CCGTGTTAAA | AGATCATATT | AAGCAACATG | 180 |
| GTCAGCAAAA | TGAAGTGATA | CTGATGTGCT  | CAGAGTGCCA | TATTACATCT | AGAAGCCAGG | 240 |

AGGAACTTGA AGCCCCAGTG GTGAATGACC ATGACAATGA TGCCAATATC CACACCGAAC 300  
TCGAG 305

## (2) INFORMATION FOR SEQ ID NO:461:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 563 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCGGCC TTCATGGCCT AAGAAATATC AGTCCAAGCA AGAGGAATTA CAGAAAGATA 60  
TGCAAGGAAG TGCACAGGCA TTGGCTGAAG TAGTGAAAAA CACAGAGAAC TTCTTAAAG 120  
AGAATGGTGA AAAGCTGTCA CAGGAAGATA AGGCTTTGAT TGAACAGAAA CTTAATGAAG 180  
CTAAGATAAA GTGTGAACAG CTTAATTTAA AAGCAGAACA GTCTAAAAAG GAGCTGGATA 240  
AAGTTGTGAC AACAGCAATC AAGGAAGAAA CTGAAAAGGT AGCAGCAGTG AAGCAGCTGG 300  
AAGAGAGCAA AACCAAAATA GAAAACCTTT TGGACTGGTT GTCAAAATGTT GACAAAGACT 360  
CAGAAAGGGC AGGGACAAA CACAACAGG TAATCGAACA GAACGGGACC CATTITCAAG 420  
AAGGTGATGG CAAGTCAGCA ATTGGAGAAG AGGATGAAGT TAATGGTAAC CTGTTGGAGA 480  
CTGATGTTGA TGGGCAAGTT GGAACCACTC AGGAGAATCT GAATCAGCAA TATCAGAAAG 540  
TTAAGGCCCA ACATGGACTC GAG 563

## (2) INFORMATION FOR SEQ ID NO:462:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GCGGCTGTGA AGATGGCGGC GGCTGCGTGG CTCAGGTGT TGCCTGTCAT TCTTCTGCTT 60  
CTGGGAGCTC ACCCGTCACC ACTGTCGTTT TTCAGTGCGG GACCGGCAAC CGTAGCTGCT 120  
GCCGACCGGT CCAATGGCA CATTCCGATA CCGTCGGGGA AAAATTATTT TAGTTTGGGA 180  
AAGATCCTCT TCAGAAATAC CACTATCTTC CTGAAGTTG ATGGAGAACC TTGTGACCTG 240  
TCTTTGAATA TAACCTGGTA TCTGAAAAGC GCTGATTGTT ACAATGAAAT CTATAACTTC 300  
AAGGCAGAAG AAGTAGAGTT GTATTTGGAA AAACCTTAAGG AAAAAAGAGG CTGTCTGGG 360  
AAATATCAAA CATCATCAA ATTGTTCCAG AACTGCAGTG AACTCTTTAA AACACAGACC 420  
TTTTCTGGAG ATTTTATGCA TCGACTGCCT CTTTtaggag AAAACAGGA GCTCGAG 477

## (2) INFORMATION FOR SEQ ID NO:463:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

```

GTTGCACTCC TGTGTACTC TTTTAGAGGT GGAAAAGAGG TGGATACTGA GATCTAAGAG      60
GAAAGGATAG TCATTACAGT TCTGAGATAT GCGCTCTCTC TATTGTCTCT GAACACAAAG      120
GGATAGTCTC TTTTCTGGAG CTGATGTCCC TGCTTGGAGG TTAGCCCCAA AACATGGCTC      180
TTGTATTGTT CTAAGAGAAA AGGCTTTTCA TTTGGTTCTT CTGATTGGTG TTACCTACTG      240
CCTAATATGT GTTCATTTTT TGACAGAGAG GCAGACTATT GAAAAAGTCT GTGTGAACAG      300
AGAGCAGTTC ATTAAGCCCA TTGCTTTTCA TAATGTGGCC TTGACCCCTT CTGCTTCCCC      360
CTTCTCCCAT GACGAGCTCG AG                                         382

```

## (2) INFORMATION FOR SEQ ID NO:464:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

```

GGACCTGCCT CAAGGACATG GGTGGACATA TGGGCGGACT CTCAGGGACA ACCAAAGTGA      60
TGATCACACT GACCGATGTC AATGACAACC CACCAAAGTT TCCGCAGAGC GTATACCAGA      120
TGTCTGTGTC AGAAGCAGCC GTCCCTGGGG AGGAAGTAGG AAGAGTGAAA GCTAAAGATC      180
CAGACATTGG AGAAAATGGC TTAGTCACAT ACAATATTGT TGATGGAGAT GGTATGGAAT      240
CATTGAAAT CACAACGAC TCTAAACAC TCGAG                                         275

```

## (2) INFORMATION FOR SEQ ID NO:465:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 488 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

```

GTTCTAGACC TACCCCGAAC AGCCCCAAC AGTCAGAGTG GCACAAAATG ACAGTCTCCA      60
AAAAGTCCCC CGACCAAGAT CTCAAAATCA AACTTGCTGT CCGAATGGAT AAGCCTCAA      120
ACATGAAGCA TTCTGGGTAT TTATGGGCCA TCGGTAAGAA TGTCTGGAAG AGATGGAAGA      180
AAAGGTTTTT TGTATTGGTG CAGGTCAGTC AGTACACGTT TGCCATGTGC AGTTATCGGG      240
AGAAGAAAGC GGAGCCTCAG GAACTTCTAC AATTGGATGG GTACACTGTG GATTACACCG      300
ACCCCCAGCC AGGTTTGGAG GGTGGCCGAG CCTTCTTCAA TGCTGTCAAG GAGGGAGACA      360
CCGTGATATT TGCCAGTGAC GATGAACAAG ACCGCATCCT GTGGGTCCAG GCCATGTATC      420
GGGCCACGGG GCAGTCACAC AAGCCTGTGC CCCCAGCCCA AGTCCAGAAA CTCAACGCCA      480
TCCTCGAG                                         488

```

## (2) INFORMATION FOR SEQ ID NO:466:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 300 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

```

GAATTCGGCC TTCATGGCCT AGCCGCTGCG GTGAGCCTTG AAGCCTAGGG CGCGGGCCCG      60
GGTGGAGCCG CCGCAGGTGC AGATCTTGGT GGTAGTAGCA AATATTCAA CGAGAACTTT      120
GAAGGCCGTC TGAGCTAAAA AATAATGCTG ATTTGGCCTC ATCATATTTA TGAAGGAGGG      180
AGAAATAGAA GCATGTATAA TGTAGAAAAA CATACTTTAT CCTTATGTTT GCATATATTG      240
TTGAATAAAT ATAGTTTAAT GAATATGTTT TCTCACCTTT CTTTGCTTGC ACTTCTCGAG      300

```

## (2) INFORMATION FOR SEQ ID NO:467:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

```

GTTCTAGACC TGCCTCGAGA TATGCCGAA GGTTCATGG CTGGTCCCAG GCCCAGCACA      60
GGCCCCGAGGC CGGGCTGCCT GGTTTTATTT TTATTTAACT TTATTTCTG TTTTATGAGT      120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC      180
CTGCCTCCCA GCCTCTCCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG      240
CAGAGGGCGG ACCGGGTGGG CAGGGGCCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT      300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCTTTT TAAACAAAA TGCCCTCGTT      360
TGTAACCCCT TAACGCTCGA G                                     381

```

## (2) INFORMATION FOR SEQ ID NO:468:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

```

GCTGTCCAAT TATACTGACC TGGCCATGAG CACGGTGAAG CAGACCCAAG CCATTCCATA      60
TACTGGTCCC TTAAATTGCT TCTGTTACCA GCTGCAGAAA TTGACAGGTG ATGTGGAAGA      120
ATTAGAAATT CAAGAAAAAC CTGCTCTGAA AGTGTTCAAA AATATTACTG TAATACAAGA      180
ACCAGGCATG GTGGTATTAG AATGGCTGGC AAACCTTCT AATGATATGT ATGCAGATAC      240
AGTAACAACG GTGATATTGG AAGTTCAGTC AAATCCCAA ATAAGAAAAG GCGCAGAACT      300
CGAG                                     304

```

## (2) INFORMATION FOR SEQ ID NO:469:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

```

GCGATTGAAT TCTAGACCAC CCCGCACTCC AGCCTGGGCA ACAGAGCAAG ACTCTTTCTT      60
AAAAAATTA AAAAAAAG GAGTACCCAT TGGGATAAAC CTCTTTGGAG GAGAGGACAT      120

```

```

AGTACAGAGG TTATACTGCA ACATGGACCC ACCAATAGCC ATGGATAACT TAGTTGGGAT 180
TACCCCTGCC TGCTGTTTAG ATACTTACAT GGACACTAAT TTCTGCCCAT CAACCTCCCT 240
CTCTTTCTCC TTCAATGCCC ATCAACCTCC CCCTCTTCT CCATCAATGC TATGTTGGTT 300
TTTTTTATT GCCATCTTGG CAGGTTTAGG GCAGAGCATG CTCGAG 346

```

## (2) INFORMATION FOR SEQ ID NO:470:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

```

GAATTCGGCC TTCATGGCCT AGGATTTTCA GCAAGAATTA AATTATTCTG CATATTGGAC 60
AGGGCCTATT TAGAGGCCTG CACATCTGTT TTTATCCATT TGTGTAACGA TACCGTGTGT 120
GAAAGTAGGT TCATGGATCA GATGAGAAAA GTCAATTCTC TAAGATACCT TCCCTTGTGG 180
CTGTGGATTC TCACCTTGAT GATTCAGCTT TGTGTGATGG AGGTGTCTGC CAGAGAATTC 240
CTGGCCACCC AGCTCCTCAG CCCTCTGCCC CCACCCCAA TACACACACC TTTCTCCATT 300
GTACCAGATG CTGGTCTCGA G 321

```

## (2) INFORMATION FOR SEQ ID NO:471:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 417 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

```

GAATTCGGCT TCATGGCCTA CTCATTTCAC TGTA AAAACCA ATAGCAAACA ACGGAAGAGA 60
CGGGCAGAGT TGAAGCAACA AAGAGAGGAG GAGGCAACAT GGCAAGAGCA GGAAGCCCCT 120
CGGAGAGACA CTCCCACCGA AAGTTCTTGC GCAGTGGCCG CCATTGGCAC CTTGGAAGGC 180
AGCCCCCAG GTATCTCCAC CTCCTTCTTT AGGAAGGTGC TGGGCTGGCC CCTCAGGCTG 240
CCGAGGGACC TGTGTAAC TGATGCAAGGGA CTCCTGCAAG CTGCTGGCCT CCATATCAGG 300
GACAATGCTT ACAACTACTG CTACATGTAC GAGCTCCTGA GCCTGGGGCT GCCACTCCTC 360
TGGGCGTTCT CTGAGGTCCT GGCAGCCATG TACAGGGAAT CTGAGGGGCTC CCTCGAG 417

```

## (2) INFORMATION FOR SEQ ID NO:472:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 331 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

```

GAATTCGGCC TTCATGGCCT ACAAGAGGCA GCTTATAGAC AACCGCAAGC TCATTGAGAC 60
GCAAAATGGAA CGGTTCAAAG TTGTGGAACG AGAGACCAA ACCAAAGCTT ACAGCAAAGA 120
GGGCCTGGGC CTGGCCCAAG AGGTAGATCC TGCCCAAGAG GAGAAGGAAG AGGTTGGCCA 180

```

GTGGCTCAGC AATACCATCG ACACGCTCAA CATGCAGGTG GACCAGTTTG AGAGTGAAGT 240  
 GGAGTCACTG TCAGTGCAGA CACGCAAGAA GAAGGGCGAC AAGGATCAGA AGCAGGACCG 300  
 GATTGAGGGC TTGAAGCAGC AGCATCTCGA G 331

## (2) INFORMATION FOR SEQ ID NO:473:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 260 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

GAATTCGGCC TTCATGGCCT AGAGGTGCTT CAGTGGTACA ATCAGTTAGC ACACAGTACG 60  
 TATACAGCAG TATGTGTGTG AGAAATTATT TTAAATATAA GAATTATCAA AAATTATAAG 120  
 AAGACCATCC CTTTAACTGA ATAGTTTCAC CAAAAATCAG AAAAAATATGT AAGTGATACA 180  
 TTTGTTTCT TGGATATAGC AATGTACCAC CTTGCATAAA TGAGACTATT AAAATGATCA 240  
 CCTGAGGTCA GAAGTTCGAG 260

## (2) INFORMATION FOR SEQ ID NO:474:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 511 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

GAATTCGGCC TTCATGGCCT ACAAAGATTG GAGGAAAAGA GGTCAAATT GGACCACTCA 60  
 GTGAGTAGCA CCAATGGCCA CAGGTGGCAG ATATTTCAAG ATTGGTTGGG AACTGACCAA 120  
 GATAACCTTG ATTTGGCCAA TGTCATCTT ATGTTGGAGT TACTAGTGCA GAAGAAGAAA 180  
 CAACTGGAAG CAGAATCACA TGCAGCCCAA CTACAGATTC TTATGGAATT CCTCAAGGTT 240  
 GCAAGAAGAA ATAAGAGAGA GCAACTGGAA CAGATCCAGA AGGAGCTAAG TGTTTGGAA 300  
 GAGGATATTA AGAGAGTGGA AGAAATGAGT GGCTTATACT CTCCTGTGAG TGAGGATAGC 360  
 ACAGTGCCTC AATTTGAAGC TCCTTCTCCA TCACACAGTA GTATTATTGA TTCCACAGAA 420  
 TACAGCCAAC CTCCAGGTTT CAGTGGCAGT TCTCAGACAA AGAAACAGCC TTGGTATAAT 480  
 AGCACGTTAG CATCAAGACT GAAAACCTCGA G 511

## (2) INFORMATION FOR SEQ ID NO:475:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 610 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCGGCC TTCATGGCCT AGTCACAGCT GTCTATTTT GTCACTGTG GAACATTGTT 60  
 CATCGTGATT TAAAAGCTGA AAATTACTT CTGGATGCCA ATCTGAATAT CAAAATAGCA 120  
 GATTTTGGTT TCAGTAACCT CTTCACTCCT GGGCAGCTGC TGAAGACCTG GTGTGGCAGC 180

```

CCTCCCTATG CTGCACCTGA ACTCTTTGAA GGAAAAGAAT ATGATGGGCC CAAAGTGGAC 240
ATCTGGAGCC TTGGAGTTGT CCTCTACGTG CTTGTGTGCG GTGCCCTGCC ATTTGATGGA 300
AGCACACTGC AGAATCTGCG GGCCCGCGTG CTGAGTGGAA AGTTCCGCAT CCCATTTTTT 360
ATGTCCACAG AATGTGAGCA TTTGATCCGC CATATGTTGG TGTTAGATCC CAATAAGCGC 420
CTCTCCATGG AGCAGATCTG CAAGCACAAG TGGATGAAGC TAGGGGACGC CGATCCCAAC 480
TTTGACAGGT TAATAGCTGA ATGCCAACAA CTAAAGGAAG AAAGACAGGT GGACCCCTG 540
AATGAGGATG TCCTCTTGGC CATGGAGGAC ATGGGACTGG ACAAAGAACA GACACAGAAG 600
GCGGCTCGAG 610

```

## (2) INFORMATION FOR SEQ ID NO:476:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

```

GGAGATTGGC CACCTCCAAG ATATGGTAA GAAAAGTGAA CAAGGTCTTG GCTCTGCAGA 60
AGGACTTATT GCTAGTCTTC AGGACTCCCA GGAAAGGCTT CAGAATGAGC TTGACTTGAC 120
TAAAGACAGC CTAAAGGAGA CCAAGGATGC TCTATTAAAT GTGGAGGGTG AGCTAGAACA 180
AGAAAGGCAA CAGCATGAAG AAACAATTGC TGCCATGAAA GAAGAAGAGA AGCTCAAAGT 240
GGACAAAATG GCCCATGACT TAGAAATTAA GTGGACTGAA AATCTTAGAC AAGAGTGTTT 300
TAAACTTCGT GAAGAGTTAA GGCTTCAACA TGAAGAGGAT AAGAAGTCAG CAATGTCTCA 360
ACTTTTGCAG TTGAAAGATC GAGAGAAAAA TGCAGCAGAG AAACTCGAG 409

```

## (2) INFORMATION FOR SEQ ID NO:477:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

```

GTATGCCTGT TCCAGACCAG CTTTCATCAG CCTCAGAGAA GACGAGTTCC CTGAGCCCCG 60
GCTTAAACAC CTCCAACGGG GATGGCTCTG AAACAGAAAC CACCTCTGCC ATCCTCGCCT 120
CAGTCAAAGA ACAGGAATTA CAGTTTGAAG GGCTGACCCG AGAGCTGGAG GCTGAACGGC 180
AGATCGTAGC CAGCCAGCTG GAGCGATGCA AGCTCGGATC CGAGACTGGC AGCATGAGCA 240
GCATGAGTTC AGCAGAAGAG CGGATACTCG AG 272

```

## (2) INFORMATION FOR SEQ ID NO:478:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ATGCGTGGGG | GTGGGGGGGC | AGGCTAGAAA | GGAGCCCTCC | 60  |
| CTCCTCGGGG | TGTCTAGGGT | GTGCTGGCCA | CTGGAAGATT | GGAGTCGCTG | ACCCAGTGCT | 120 |
| GACCCTGACC | CTTGGCTGGG | TCCACTCTGC | AGACTCCACC | TGAGGAGACC | CACCCAGGGT | 180 |
| GAAGCTCGGT | GCCCAGGCCT | GAAGTGAAGC | CGGCCGGGTG | CAAGGGCTGA | GGTGTGAGGT | 240 |
| CGGCCAGGC  | CTCTTCCCAG | GCCTGAGGGT | GGCTACAGCT | CGAG       |            | 284 |

## (2) INFORMATION FOR SEQ ID NO:479:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACTAAATTTT | CCAAAACGTT | GATTTCGATA | ATACAGTGGT | 60  |
| ATGTGCAATG | GATAAATTGC | CGTTATTTCA | AAAATTAAAA | TTCTCATTTT | CTTTCCTTTT | 120 |
| TTTCCCCCCT | GCTCCACACT | TCAAACTCC  | CGTTAGATCA | GCATTCTACT | ACAAGAGTGA | 180 |
| AAGGAAAACC | CTAACAGATC | TGTCCTAGTG | ATTTTACCTT | TGTTCTAGAA | GGCGCTCCTT | 240 |
| TCAGGGTTGT | GGTATTCTTA | GGTTAGCGGA | GCTTTTTCCT | CTTTTCCCCA | CCCATCTCCC | 300 |
| CAATATTGCC | CATTATTAAT | TAACCTCTTT | CTTTGGTTGG | AACGACCTCG | AG         | 352 |

## (2) INFORMATION FOR SEQ ID NO:480:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ATTAAAAGAA | TGTTCTTTCA | TTAAAAGACC | AAAAAGAAGT | 60  |
| TAAAACTTAA | ATTGGGTGAT | TTGTGGGCAG | CTAAATGCAG | CTTTGTTAAT | AGCTGAGTGA | 120 |
| ACTTTCAATT | ATGAAATCTG | TGGAGCTTGA | CAAAATCACA | AAAGGAAAT  | TACTGGGGCA | 180 |
| AAATTAGACC | TCAAGTCTGC | CTCTACTGTG | TCTCACATCA | CCATGTAGAA | GAATGGGGCT | 240 |
| ACAGTATATA | CCGTGTTCTC | GAG        |            |            |            | 263 |

## (2) INFORMATION FOR SEQ ID NO:481:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GGAGCAGGAA | GAAATGCAAG | AGGAGATGGA | GAAGCTGCGA | GAGGAAAACG | AGACTCTCAA | 60  |
| GAACGAGATC | GATGAGCTGA | GAACCGAGAT | GGACGAGATG | AGGGACACTT | TCTTCGAGGA | 120 |
| GGATGCCTGT | CAACTGCAGG | AAATGCGCCA | CGAGTTGGAG | AGAGCCAACA | AAAAGTCCG  | 180 |
| GATCCTGCAG | TACCGCCTCC | GCAAAGCCGA | GCGCAAAAGG | CTCCGCTACG | CCCAGACCCG | 240 |

GGAAATCGAC GGGGAGCTGT TCGCGAGCCT GGAGCAGGAC CTCAAGGTTG CAAAGGATGT 300  
 ATCTGTGAGA CTTCACCATG AATTAGAAAA TGTGGAAGAA AAGAGAACAA CAACAGAAGA 360  
 TGAAAACGAG AATCTCGAG 379

## (2) INFORMATION FOR SEQ ID NO:482:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 301 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGGCC TTCATGCTTT CTAGGCAAGA GGTCAACAGA AGATTGAGAG AAAGAGGAGA 60  
 ACCAATCAGA CTATTGGAG AGACTGATTA TGATGCTTTT CAACGTTTAA GGAAATAGA 120  
 GATCCTCACA CCAGAAGTTA ACAAGGGATT GAGGAATGAT TTGAAAGCAG CCTTGGATAA 180  
 GATTGATCAG CAGTACCTCA ATGAAATCGT CGGCGGTCAG GAGCCTGGAG AGGAAGACAC 240  
 ACAGAATGAT CTGAAAGTTC ATGAGGAAAA CACCACAATT GAAGAGTCAG AGGCCCTCGA 300  
 G 301

## (2) INFORMATION FOR SEQ ID NO:483:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 168 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

TGGTCTCCAG AAATGCTTTG GGTTCATCTT TCATTGCTGC AAGGAAGTTC CATGCCTCTA 60  
 AACTCATCTT TCAAAAGACT GGGACTGCTG AGATGTCCTC TATCTTGAA GAGCGTATTC 120  
 TTGGAGCTGA TACCTCTGTT GATCTTGAAG AAAGTGGGCT ATCTCGAG 168

## (2) INFORMATION FOR SEQ ID NO:484:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 452 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GCAAGCTCTC CATGGAAACC CCTGCCAAAA CAGAAGAGAT AAAACTGGAA AAGGCTGAGA 60  
 CAGAGTCCTG CCCAGGCCAA GAGGAGCCTA AATTGGAGGA ACAGAATGGT AGTAAGGTAG 120  
 AAGGAAACGC TGAGCCTGT CCTGTCTCCT CAGCACAGAG TCCTCCCAT TCTGCTGGGG 180  
 CCCCTGCTGC CAAAGGAGAC TCAGGGAATG AACTTCTGAA ACACCTGTTG AAAAATAAAA 240  
 AGTCATCTTC TCTTTGAAT CAAAAACCTG AGGGCAGTAT TTGTTAGAA GATGACTGTA 300  
 CAAAGGATAA TAACTAGTT GAGAAGCAGA ACCCAGCTGA AGGACTGCAA ACTTGGGGG 360  
 CTCAAATGCA AGGTGGTTT GGATGTGGCA ACCAGTTGCC AAAACAGAT GGAGGAAGTG 420  
 AAACCAAGAA ACAGCGAAGC AAAGGACTCG AG 452

## (2) INFORMATION FOR SEQ ID NO:485:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

```

GTTTGTAAT CACCTGATGA TGGTGATATA GCTGTGGCCA ACGAAATGTC AAGGGAAGTC      60
TGCTGGGGAA GGTAGACGTA GGATAGGAGT ATGGGAAAAA ATTATTCACT CAAAAGCATG      120
ATGCACAGAG GAGCTATGAT CTTTCTTGT TTTCTCACT GGATGTTGTC ATGTCTGTAT      180
GTACTTCCTG GAACTGTGGC ACCATCTTAC AACCATGAAA GGAGCTCACA TGAATCATG      240
TTGAACATAG CAGAGCGGGA AGATGGAAGG AATCCGAGAT CTATGTTTGA TGTAAAGCGA      300
TGATGTTAAA AACTTAAAAA ACTCCAGAAC TCTCTTACCC CTGGTGCTCG AG              352

```

## (2) INFORMATION FOR SEQ ID NO:486:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GAATTCGGCC TTCATGGCCT ACTCAGCTGG AAGCTTTACT CCTCCTCGA CAGAAAGTGA      60
GGATTACAGA TGACATGGAT CAGGTGGAGC TGAAGGAGTT TTGTCCCAAT GAGCAGAACT      120
GGCGTCAGCA CAGGGAGGCC TACGAGGAGG ACGAAGACGG GCCCCAGGCT GGAGTGCAGT      180
GCCAGACGGC ATGACGTGGT GCGGGGCAGC GTGGCCCCAC CGGACTAGCA CATGATGAAT      240
GTAAAGTTGG CACAATGAAA ATGACATCGC TTTAATGGCC TTGTGTTTGG GATGTCCTGT      300
GTATGTGTTT AGCATTCCTA ATTGCTGAGT GTCTTTTGG CTTTCTTTT GGTGTGTAAT      360
TAAGTTATAG CTTAATTTAT ATTTAAATGT TTTAAGTATA AATCACCTCT AGGCCTCGAG      420

```

## (2) INFORMATION FOR SEQ ID NO:487:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GGAGTGTCAG GAATAACCGC TCAGGTTGAG TGTAAAAATA TTTTATGGTC CCATCAGCAT      60
CAACCTGCCT TAATGCTTCT TTGGTTGTCT CTTGAGCTAG TTCTATTTT ACAGCACATG      120
ATATATGAAG TGATTTCACA CCATGCCCAA GATACGGGCC ACCCACCAGC TACATGGCAT      180
GATGACTCTG CAGGCCGAAC GGCAGCCTTG ATAATTATAA GGCCATGGGT AATAGCCCCC      240
CAGGGGTTCA CAGATCTTCT GGCAGTGGGT GTAGCTCCGC CTACATTCTA TACAACAGAT      300
TCCTTCGCCT GCCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:488:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```

GAATTCGGCC TTCATGGCCT AGGTGTTTGC TTAAAGGAGG AATAGAAAA TCAGGTGGTC      60
ACTACTACAA GGGAAAGGGG AATGTGGTTT CAAAAAGGCT TTTGCCTTAT TTATTTTAT      120
AGTAGATACT TATTAATCAA ACATTTAAGA GCAACTCAGT AAGTATTGTG CCAGAATGAA      180
CTGTTCTCAA GACTAGGTTT ACTGCTTGAC ATTAGAGGTT AAGGTGTTGC AATTCTGAGT      240
CTTGTTTTTT ATTACTACCA ACCCCCACCC CCGCCGATAT TACTTCATCT CCCTCCAAGG      300
TCACTGAAGT TTTTCATAAC TATTTTAACA GATATTGCAA TAAATGTACA GTAATTTAAC      360
TATCCTTCTT GCTGGGCATG TCAAAGTGTT TTCTATTATT ACAGATAATG CTGCAATGAA      420
TCTTTATTTA TATAATACAC TTTTATCCAG TTGTCATTTT TTCTTTGTCT TATATTCTCA      480
CATGGAA                                           487

```

## (2) INFORMATION FOR SEQ ID NO:489:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACA AAAACTGTGA ATAGTGAGTG ATTTAAAAAA      60
AAAAAATAAA CTGAAAGGAA AATTGTTGAA TGTTTGAATC TTGCCTAGTC CCCTCACCCC      120
CAAGGCTGGC TTCTAGAGTT AAGCTCGAG                                           149

```

## (2) INFORMATION FOR SEQ ID NO:490:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

```

GCAAATTTTG GAAGATTAG ACCATTATTT CTCAAAATAT TTCTTACCTG CTCTCTCCTC      60
TTTCTCCAC TCCTCCCAT CACCTTCTGG CACTTCCATT GTTCATATAT TGATATGCTT      120
AATGATGTTT CTGAAGATTT ATTCATTTT CTTTATTCC TTTTATTCT GTTCCTCAGC      180
CCAGATCATT TCAATGCACA TATCCTCAAG TTTGCTGATT CTTTCATTTC CTGCTCAGAT      240
CTGCTGCTGG CCCCTCGAG                                           259

```

## (2) INFORMATION FOR SEQ ID NO:491:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACAATGTTT AATCAGAGAC TCATATTCAC CTTTAAGTAA  | 60  |
| AAAACATACT TCTTCCCCC TAATAGTCAC AGCATTCTGC AGAGCTAAAG AAGGAGACCA  | 120 |
| GGAGTCTGTG GGAGCAAAGA TCATTTTGTG AAGCTAGAGG TCCAATTTAA AAGCAGTTGC | 180 |
| TGCTACAAAT TAAACATAT TTGCATTCTG CCTAAAATAG TTGTCTCTTT GAACGTTGGG  | 240 |
| TGCCTTTTTT AGGTTGCTTT GTGAATAATA TGCACAAAAT GAAAATGTTA AAAAAACAT  | 300 |
| GTAGCCTGCT AACCTCGAG  | 320 |

(2) INFORMATION FOR SEQ ID NO:492:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 224 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

|  |     |
|--|-----|
| GAATTCTAGA CTGCTCCA GCCACTCAA ACCTTTGGTG ACCAAAGTGG GGTAAAAACA   | 60  |
| AGCACCTGCG TGGTGTGG TTATTCTATG CTCTCCAATA TATATAAATT TTAAGAAGTT  | 120 |
| TTTCTTGAGG TGGTCAGTTC TTAAACCAAG AAAGTGGTAG TAGTTGATT TAATTAGTGT | 180 |
| AAAGTTGTCT TCGTAACTTC CGTGTGGTT GGAAATAGCT CGAG                  | 224 |

(2) INFORMATION FOR SEQ ID NO:493:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 320 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

|   |     |
|---|-----|
| GAATTGCCTT CATGGCCTAC CGAATCAGAC AGAAGAAAGC CCAGGGCTCC ACTTCTTCTA | 60  |
| CAAGGTTGCA TGAGCCCGAG AAGAATGCCA GAGAAATAAC ACAGGACACA AATGATATCA | 120 |
| CATATGCAGA CCTGAACCTG CCCAAGGGGA AGAAGCCTGC TCCCAGGCT GCGGAGCCCA  | 180 |
| ACAACCACAC GGAGTATGCC AGCATTGAGA CCAGCCCGCA GCCCGCGTCG GAGGACACCC | 240 |
| TCACCTATGC TGACCTGGAC ATGGTCCACC TCAACCGGAC CCCAAGCAG CCGGCCCA    | 300 |
| AGCCTGAGCC GTCCCTCGAG   | 320 |

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 504 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

```

GAATTCGGCC TTCATGGCCT AGGTAGCTCT ATGGTTTTCC TCGCGTTCTT GAGTCGGGAA      60
ATGGCCGCTG TGTGGTTGCA ACGGAGATAA ATTCCCGGAA CCGCGATTCC GCGTGTCAAG      120
AATTCGAATT TAGAGTTTAA TTTCTCAGAG CATTCTCTCC AGGAAGAATT TTTACAGTAT      180
CTCAAGACT TCACTTGACT TCTTGATCCT GCATAAAACC AAGGAGAAAA GAAATGGGTC      240
GCTCCAATTC TAGATCACAT TCTTCAAGGT CAAAGTCTAG ATCAGAGTCT AGTTCTCGAT      300
CAAGATCAAG ATCTCATTCT AGAAAGAAGC GATACAGTTC TAGGTCTCGT TCCAGAACAT      360
ATTCAAGGTC TCGTAGTAGA GATCGTATGT ATTCTAGAGA TTATCGTCGC GATTACAGAA      420
ATAATAGAGG AATGAGACGA CCTTATGGGT ACAGAGGAAG GGGTAGAGGG TATTATCAAG      480
GAGGAGGAGG TAGAAACCCCT CGAG                                          504

```

## (2) INFORMATION FOR SEQ ID NO:495:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

```

GAATTCGGCC TTCATGGCCT ACCAACTTAG TCATTGAAG CCCAAGAGTC TAATTTTATA      60
TGCCCTGCCA ATGTCCTCAT CTATTGCAGA ATGNATAATT ATCTATTTGT TTGGACTAT      120
ATGTTACAAA AATTTAAAC ATAAGATCCT CTCTCTATAT TTCATTATTG GTGAACCCAC      180
ATTGCTCGAG                                          190

```

## (2) INFORMATION FOR SEQ ID NO:496:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

```

GAATTCGGCC TTCATGGCCT AGGTAAGAAA ATCGTCAATG AATTGTGGCA TGACCAGGTG      60
GAGAGTAAGT GTCATAAAGA GGGATAGTGG ATAGTATAAT GTCAGGCACC TCAAAGGAAC      120
TGGGCAGGGA GTTAGGGAGT AAAAAGGGCG GTGGTCTGGA AGCAGAAAGG AGGAGCAGTG      180
GTCCAGTAGG GGCTGCAGAG CTGCAAGGCT TTGCCTCAAT CCTGTCAAAG GCAACTTCAA      240
GCTTTCCAGG AGCCATACTC CTTCAATTGT TCATTACTTT CTAGATTAGG AAATCACCAC      300
TCGAG                                          305

```

## (2) INFORMATION FOR SEQ ID NO:497:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGTGGACCA | ATGTACAGCA | CTCAGGTTCA | TGGCCAACTG | 60  |
| GGTGGACTAT | TTCAGTACTC | TACAGGTGCC | TCAGTGGAGG | GAGAGCCCAT | TGTCCAGGTG | 120 |
| CTTCCTGGGA | CAATACCAGA | GCGCTCTGGG | AAAAGGGCTG | CTTGCAGGCA | CGAGGGCTCA | 180 |
| CAATGAGCCA | TGGTGGGCCA | CCGCCACGGC | CCATGCAGCC | TAATAGCAAG | CCAAGGCAGG | 240 |
| AAGCTGTGAG | AGCTGCTCAA | CAGTGCCCCC | TAGGGACTGG | TTACTTCCTG | ACCCTAACCT | 300 |
| CCGGAAATCT | GCTGTCAAAG | GCAGATTTCT | CGAG       |            |            | 334 |

## (2) INFORMATION FOR SEQ ID NO:498:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 160 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTAGGGG | CTTTTTCATC | CTTAGGAGAC | CTGAGTCCTC | AAGAAAACCC | TTTCTCGGAA | 60  |
| GTATCTGCTC | CTTCAGAAC  | TTTATAGAA  | AAGAATAATA | CAAAACACAC | AACGTCAAGA | 120 |
| AATGCCTTGT | AAGAAAATGA | TTTTATGGAA | AACACTCGAG |            |            | 160 |

## (2) INFORMATION FOR SEQ ID NO:499:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACTCGATCTC | CTGACCTCGT | GGTCCACCCG  | CCTCGGCCTC | 60  |
| CCAAAGTTCT | GGGATTACAG | ACGTGAGCCA | CCGCGCCCGG | CCTTGTCTCTG | GATTTTTTAA | 120 |
| CCAAGCACTA | TTATTATAG  | TTGCGTTAAA | ATAAATAGGG | ATGGGTTTGA  | TAAGTCACCA | 180 |
| CTTGGTGCTT | TAAATTCTGC | CATCATCTTT | TCTAGGAGTG | TAAGATATAG  | AGATACACAT | 240 |
| AAGCAGAAAA | TTTTTTTTTA | CATGAGGATA | CTCGAG     |             |            | 276 |

## (2) INFORMATION FOR SEQ ID NO:500:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCTGGCCTA | GACCTGCCTC | TGATATGTAC | TTGGTTTTTA | AAAACCCATT | 60  |
| TTGTTCTCTC | TTGTTTCCTC | TCTATTTTCA | CCTAGTATCA | GAAGGCCAGG | CGAGACTGCA | 120 |
| ACACTGCTCA | TCACCCCGCG | GCGTGATCCC | TGCTCTTAGG | TGCTGGGCAG | AGGGGAAGGG | 180 |
| TGGTCAGGGT | GAGGATGGTG | AGGGAGGGCT | GGTGAGGGCC | TCAGAGGAAT | ACTTGAACA  | 240 |
| ACAGCAGTGT | CTCGAG     |            |            |            |            | 256 |

## (2) INFORMATION FOR SEQ ID NO:501:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 635 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```

GAATTCGGCC TTCATGGCCT AGTGGTTTGT TTGTTGTTGT CGGAGACAGG GCCTCGCTTG      60
GTCTCCAGG CTAGAGTGCA GTGGCATGAT CACGACTCAC TGCAGTCTCG ACCTTCTGGG      120
CTCAAGTGAT CCTCCTGTGT CAGCCTCCCA CACAGCTGGG ACTACAGGCA CATGCCACCA      180
CATCCAGCTA ATTTAAAAA CATTTTTTTT GTAGAAATAG GGTCTTACCA TGTGCCCCAG      240
GCTAGTCTCA AATTCCGGGG CTCAAGCAAT CCTCCACCT CACCTTCCCA AAGTGCTGGG      300
ATTACAGGCA TGAGTCACCA TACTTGGCCC GAGTGAGCCA AGATTGCACC ACTGCACTCC      360
AGCCTGGGCT ACAGAGCAAG AACTATCTT AGATCCNNA AGGAAAAAA AAAAAAGAG      420
AGAAAGAACC AGAGAAACAT AAGGAAGAGT GAGAGGAAGA AAGAAAGATG CAATTGGGA      480
AGAAATGAAA AAGAAATGAA TAAAGAATAA AATAATGTAA CGGTCAATAA ATAGGACTTG      540
TGAATGGAGG CCTTTAGGCC AAAGGCTATG ATTAATTTC AAGCTATGTTA CTGAAGTCCA      600
TAAACAAAGG ACTCAGATCT AAATGGGTAC TCGAG                                     635

```

## (2) INFORMATION FOR SEQ ID NO:502:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

```

GAATTCGGCC TTCATGGCCT ACCCGTAGAA ATCCCCCTTT CTCTAATAGC GAGGCTCTAA      60
CCACACAGCC TACAATGCTG CGTCTCCCAT CTTAACTCTT TGCCTTTGCC ACCAACTGGC      120
CCTCTTCTTA CTTGATGAGT GTAACAAGAA AGGAGAGTCT TGCAGTGATT AAGGTCTCTC      180
TTTGGACTCT CCCCTCTTAT GTACCTCTTT TAGTCATTTT GCTTCATAGC TGTTTCTGTC      240
TAGAAATGGG AAATGCCTAA GAAGATGACT TCCCAACTGC AAGTCACAAA GGAATGGAGG      300
CTCTAATGTA ATTTTCAAGC ATCTCCTGAG GATCAGAAAG TAATTTCTTC TCAAGGGGTA      360
CTTCCACTGA TGGAAACAAA GTGGAAGGAA AGATGCTCAG GTACAGAGAA GGAATGTCTT      420
TGGTCCTCTT GCCATCTATA GGGGCGCTCG AG                                     452

```

## (2) INFORMATION FOR SEQ ID NO:503:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

```

GAATTCGGCC TTCATGGCCT ACAAATTGT CTGACATAA GTAATTGGG TATGCTGTAT      60
AAAGGCTTCT AAGAATTAAG AAACATGGCC CGGGTTGCAA ATTTTAATGC ATGACTACCT      120

```

|  |     |
|--|-----|
| TTTTTCTAT AGAATATAGC TTTTGTGAGA TTCTCAGCAG TGGCTCTGAT CCAGAAAACA   | 180 |
| TTAAGAACCA CTGGTCATGA GTGGTGATTT TCAGCTTTTT TGGTCTTAAC CCACCTTAGGT | 240 |
| GGGACAGAAG CTCCTTATCT CACCTATACC ATCCAGCATC CTCGAG                 | 286 |

## (2) INFORMATION FOR SEQ ID NO:504:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 424 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

|   |     |
|---|-----|
| GAATTCAGCC TTCATGGCCT AGAGGGGTTT AGGATTCAAA GCAAAGGGA GACAGCTACT  | 60  |
| AAGTAAACTA CAAAATAATT GCTAAACTGA AAATTGTATA AAGTGTACTG GACAGATGAT | 120 |
| GTTCTTAATT CTTATCCATG AAATATTTTC TGCCTTCTTA GAGGAAATAG CACCTGACAC | 180 |
| AACACTAGCC ACATTGTAGG TGATCAATCA GCACATGTCT AAATAAATTA ATTAATAAAG | 240 |
| AATCAATTAG AAATCCACT GAAAATTCTT CTAAATATA ACCAACTTCA TTATGACAAG   | 300 |
| CTATGAATAT AGAGCTTACA TACATGTTAT ATATCAATAT GTGAGTAGAT AAAGAATGAA | 360 |
| TGCCTTAAAT TGTTGGATTT TTTATTGTTT TTGTTCTTGT TTTGGAGATG GGGTCTCACT | 420 |
| CGAG  | 424 |

## (2) INFORMATION FOR SEQ ID NO:505:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 204 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

|   |     |
|---|-----|
| GAATTACTCA GTTTTCAGGT TCTTCCTAGC TCGGGGCTTT TAAATTTTGA AATCTAAACA | 60  |
| TTCTTTCCCA CCATCCTTTT TGACTGTTGA CCTTGGTTTT CTCTTCTAAG TTTCTGTCCC | 120 |
| TCTGCTTCCT TACTTTTTTT CCTTTTGAA TTCTATCTTT ATCTGTCTTT TGTCACTTT   | 180 |
| TTAATGCTAT ATATGGATCT CGAG  | 204 |

## (2) INFORMATION FOR SEQ ID NO:506:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 218 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGAGA TGTACAGTAA TAAGTATGCA | 60  |
| CAGAAATGTT AGATTATTTT TGAAGATGTG GAGAACTAC TGTATTTTT GCTTATATTC   | 120 |
| TTCTCTAAAA ATTCATAAA TGAATAACAG TTATTGGTTT TGCTATTCAA GATAATTATA  | 180 |
| AAAATATCTA TTATAGCTAA TCTTCACATG AACTCGAG                         | 218 |

## (2) INFORMATION FOR SEQ ID NO:507:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

```
GAAGTTTAAC ATTTCAACTG TTGGTAAAAT CTCCTGGTG CCACCTTGTC GCACCCCTCT 60
GTTATGAGGC ACAGTTAGTG GGTATTGAG AGGTTTGTC AGTGAAGCTC CTGCCACTGT 120
AGACCTAAAT GTTCTCTCC CTGTTGAAGT GACCTGCCTT CCTCTTAGT ACCTAACACA 180
GTTGGCAAAG AGCATGGCTA ACTCAAACCC TTTCTTTGG GGGCAGGCTT CCCTTTCTCT 240
CTGGCAGGTA TATTAAAAA TTACAAAATA GTAAATTGC CAAATTTTC TTGGTGTGTA 300
CCAAGGCATA AAGACTGAAA AATATCTTAT GAATTAGTTC ACTTCCCTCG AG 352
```

## (2) INFORMATION FOR SEQ ID NO:508:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 283 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

```
GAATTCGGCC TTCATGGCCT AAAATGATAC AGTGTGCAGA ACTGGACCCA GTAGGGAATG 60
ATAAAATGTA CAGATGTGCA GAACAGGACT TGGTAGGACT CAGCAGAGAA AACAGGAGGA 120
GAGATGAAAA TGATATGGTG TGCAGAACTG GACTCAGTAA GGTGCGGAAA GGGGAAGGAT 180
TCTGACAGAA TCCAGCACAA AACAGAGAG GGTGCAGAAA AAGAGATTG GTCACCTAGA 240
CGTGTGGAGT TGGAGGAGCC TGTGGGAAAT CCAGGATCTC GAG 283
```

## (2) INFORMATION FOR SEQ ID NO:509:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

```
GAATTCGGCC TCATGGCCTA CTCTCCTTC TTAACCTGTG TACTTGGGG CACTTTTGAT 60
TTTGGTCCCA CATCATTGAG GAAGCTGGCC CAGAGTTCGT CCTCCTTCTT TTTCTGGCA 120
TCCTCTGATC CAATGCCTTT TTCCTGCTCT GCAGCGTCAT CTTCTCCTC ACTACTGCTT 180
CCCTCAGATT CTGAATTGGC ATCCTCCTCT TCCTCTTCTT CTAATGAGAG GCCACCTTGT 240
CTTCTCTTCC TGGCTGGAAT GCTCTGGGCC TTTCTTTTTC TCCCTTGGGT TTTCTGTGTC 300
TGCTCTTAC CATTAGGCCA TGAAG 325
```

## (2) INFORMATION FOR SEQ ID NO:510:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

```
GAATTCGGCC TTCATGGCCT AGACAGGAGG TCATTGGGGA TTTTAGAAGG TTACTACTGGA      60
TACATTTCCTA TTAAGCTTCA CGATATCCCA CAGGTCCATT CTGTGTGAAA TGGTCTAAAA      120
ATTTCTGTGT CTCATGCTTC ATTTTCTTCT TTTAGTAATA TTCCTAATTG TGTAAATAG      180
TATTTCTTTT CATTATCTT AATTATGTTA TATTAAGATA TCATGTGTAT GCTTAAATTA      240
TACTTTTGGG CTTCAAATGA GTGACCCAC TCAGACTCGA G                          281
```

(2) INFORMATION FOR SEQ ID NO:511:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

```
GAATTCGGCC TTCATGGCCT AATTCCTTG ACTCAAGACA GCTAACTTCA TTTTCAGAAC      60
TGTTTAAAC CTTTGTGTGC TGGTTTATAA AATAATGTGT GTAATCCTTG TTGCTTTCCT      120
GATACCAGAC TGTTCCCGT GGTGGTGTAG AATATATTTT GTTTTGATGT TTATATTGGC      180
ATGTTTAGAT GTCAGGTTTA GTCTTCTGAA GATGAAGTTC AGCCATTTTG TATCAAACAG      240
CACGCTCGAG                                250
```

(2) INFORMATION FOR SEQ ID NO:512:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

```
GAATTCGGCC TTCATGGCCT AATTGATTCT AATCTTTCCC AAACAGTGCT GTGGCAATGT      60
ATGAAAGTAA TAAAAATAAT CCTTTTCTG TTAACAAAAA AATTGCTGTT ACTTGCTGTT      120
TTGTTATGCT TTTGCTGGAG ATTTTCCAC CCATCTTAAA GCAGCAACTT CAGGATGGGG      180
GAATCAAGCA AAACCATGGT GAAGAGATTC ATTTAAAGAG GACAAGTCTC GAG              233
```

(2) INFORMATION FOR SEQ ID NO:513:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

```

GAATTCGGCC TTCATGGCCT AGTCACCTTT TGTGGGAACT TCTCTCAGCG AAGCGGAGCA      60
TGCGAATTG ACATCATGAT TGTCTGAAAA TTGGTAAGCC ACTATCCCAG AAAGAGCTCC      120
CTATGCCCGAG GCCTTGCAAT GCTAAGAGAA GGAGGCAGGA GAGAGACAGG GAGCGACACT      180
ACATTTGGTG GGGTGAGGAT ATGAGGTTCC TTGGACATCA TGGCCTCCAG TGAATATGTG      240
GGTGATGGCT TGGAACCTAA GCTTTTTTGC TAGTGCCCCA CAAAAGAGTA CCCTCCACAA      300
CCCATCTGTG GACCACAGCA GTGCCTCTCA ACAAACATGT GCCCAAGGA GTCTCGAG      358

```

## (2) INFORMATION FOR SEQ ID NO:514:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

```

GAATTCGGCC TTCATGGCCT AGAATAGAGG AAAATAGCCG CCTGGTGGCT AGACAATTTA      60
GGTGTAGAAA ACACATTTAT ATGGTTCTTT GAATGTAACA GTGGTAAGA ATATAGGTTT      120
AGTTGTTGCT GCTAAGTAGG GGGAAATGAC ATTTTATCT GGTATGTTG AGAATAAAGT      180
AAATTTCAAA ATTTGAGATG ATCGAAGTTT TTATTTATAA ACTTAAGTAT TATTATAATA      240
TGTTACATAT TTTATTCTTT AAAAATTGTA ATTCAGAGAG TGTAACAAAA TGTACTTCCT      300
CACTTTCTTG CTTTTTGTTT CCCAGAAGTA ACTCGAG                                337

```

## (2) INFORMATION FOR SEQ ID NO:515:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

```

GAAAAGATGG AAGAAAACCA CCATAGCACT GCAGAAGAAC TACAGGCTAC TCTACAAGAA      60
TTATCAGACC AGCAACAAAT GGTACAGGAA TTGACAGCTG AAAATGAGAA GCTGGTGGAT      120
GAAAAGACGA TTTTAGAGAC ATCCTTTCAT CAGCATCGAG AGAGGGCAGA GCAGCTAAGT      180
CAAGAAAATG AGAAGCTGAT GAATCTTTTA CAAGAGCGAG TAAAGAATGA AGAGCCCACC      240
ACTCAGGAAG GAAAATTAT TGAAGTGGAG CAGAAGTGCA CAGGTATTCT TGAACAGGGC      300
CGCTTTGAAA GAGAGAAGCT ACTCAACATT CAGCAGCAGT TGACCTGTAG CTTGCGGAGA      360
CTCGAG                                366

```

## (2) INFORMATION FOR SEQ ID NO:516:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

```

GCGAGTGAGC CGGGGTAGCA TCACCTCACT CCAGCCTAGG TGATGACAGA GTTAGATTTT    60
GTCTCAAAAA AGAAAAAGAA AACAAATCCA GGATTATTAT TTCTACGTAA ATGTGACATA    120
TTATTTCTAT GATATTATTT CTTTGATCTC GTAGCCACAC TGTCCCAAT AATGATTATG    180
AGAAAAAGTA CCCTCTGTTT GAAGGCAATC ATGGGGAAAA TATAATTCAC AAAGTATTTT    240
AAAATTAAAA TCCTGTGTAT TTCAAAGAC GATGGTCCTA TTTAAGAAA AATAACCTTG    300
CAATTCATTT GCTTTTTCAT TGGCTCGAG                                     329

```

## (2) INFORMATION FOR SEQ ID NO:517:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

```

GAATTCGGCC TTCATGGCCT AGTCCTTTCA AGTACACAGA GAAATTTTGC TTGAATTTCT    60
GGAGGAAGAG TCCAGGGTTC GGGAAAAGGG ACTGGGTGGT ATCTATCTGG GGCCCCAGAC    120
AGCGGCACCTT CTTTCTTCTG TGCTGGAATT CGGCGAACAA TCATATCATC TTTTCCAAA    180
TCCGGAAGTA CAAGTTCACC TTCTCTACAC TGTAATAATTA TATCTCGCTC TACAGAATCA    240
TCTTGCTCAG AGAACTTTCT AAAGTCTTCA AAAGCTCGGA GAACATATGG ATTTGCATGG    300
AAAGCCCCAG TCTTTCTGAC AAAGAAATCA TCATTCTCTA AGTCAGGATC CAGGGCTGCC    360
ATCTCGAG                                     368

```

## (2) INFORMATION FOR SEQ ID NO:518:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 397 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

```

GAATTCGGCC TTCATGGCCT ACGCTGAGAT CAAGATTCGG AGTTTGGGCT GCCTAATAGC    60
TGCAATGATA CTGTTGTCCT CACTCACCGT GCACCCCATC TTGAGGCTTA TCATCACCAT    120
GGAGATATCC TTCTTCAGCT TCTTCATCTT ACTGTACAGC TTTGCCATTC ATAGATACAT    180
ACCCTTCATC CTGTGGCCCA TTTCTGACCT CTTCAACGAC CTGATTGCTT GTGCGTTCCT    240
TGTGGGAGCC GTGGTCTTTG CTGTGAGAAG TCGGCGATCC ATGAATCTCC ACTACTTACT    300
TGCTGTGATC CTTATTGGTG CGGCTGGAGT TTTTGCTTTT ATCGATGTGT GTCTTCAAAG    360
AAACCACTTC AGAGGCAAGA AGGCCAAAAA GCTCGAG                                     397

```

## (2) INFORMATION FOR SEQ ID NO:519:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 640 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

```

GAATTCGGCC TTCATGCCTA CTTTGGTAAC AGAAGAGAAG ACTGTGGAGC CAGCTACCGT      60
CTCAGAAGAA GCAAAGCCTG CATCTGAACC TGCTCCTGCC CCTGTGGAAC AGCTGGAACA      120
AGTAGACCTG CCCCAGGAG CAGACCCCGA TAAAGAAAGT GCCATGATGC CTGCGGGTGT      180
TGAGGAAGGT TCATCAGGTG ACCAGCCGCC TTATCTGGAT GCCAAGCCTC CAACTCCCGG      240
GGCCTCGTTT TCCCAGGCAG AGAGCAACGT AGATCCAGAG CCTGACAGTA CCCAGCCACT      300
TTCAAACCA GCTCAGAAGT CTGAGGAAGC CAATGAGCCA AAGGCCGAAA AGCCAGACGC      360
CACTGCAGAT GCTGAGCCTG ATGCAAAACA GAAAGCCGAA GCTGCTCCTG AGTCTCAGCC      420
CCCAGCTTCT GAAGATTAG AGGTGATCC TCCAGTTGCT GCAAAGGATA AAAAGCCAAA      480
CAAAAGCAAG CGTTCAAAGA CCCCTGTTCA GGCAGCTGCA GTGAGTATCG TGGAGAAGCC      540
CGTCACAAGG AAGAGTGAGA GGATAGACCG GGAAAAACTC AAGCGGTCCA ATTCTCCTCG      600
GGGAGAAGCA CAGAAGCCTT TGGAATTAAA GACACTCGAG                                640

```

## (2) INFORMATION FOR SEQ ID NO:520:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

```

GAATTCGGCC TTCATGGCCT AGCAAGAGAA AGAGAAGTGC AAACACTCCC ACGGCGAAGC      60
GCCCTCCGTG GACGCGGATC CCAAGTTACC CAGTAGCAAG GAGAAGCCCA CTCACTGCTC      120
CGAGTGCGGC AAAGCTTTCA GAACCTACCA CCAGCTGGTC TTGCACTCCA GGTGCCACAA      180
GAAGGACCGG AGGGCCGCGC CGGAGTCGCC CACCATGTCT GTGGACGGGA GGCAGCCGGG      240
GACGTGTTCT CCTGACCTCG CCGCCCCTCT GGATGAAAAT GGAGCCGTGG ATCGAGGGGA      300
AGGTGGTTCT GAAGACGGAT CTGAGGATGG GCTTCCCGAA GGAATCCATC TGGATAAAAA      360
TGATGATGGA GGAAAAATAA AACATCTTAC ATCTTCAAGA GAGTGTAGTT ATTGTGGAAA      420
GTTTTCCGT TCAAATTATT ACCTCAATAT TCATCTCAGA ACGCTCGAG                                469

```

## (2) INFORMATION FOR SEQ ID NO:521:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

```

GAATTCGGCC TTCATGGCCT ACCCGTTTCC TCTAGTTTCT TCCTGTAGTA CTCCTCTTTT      60
AGATCCTAAG TCTCTTACAA AAGCTTTGAA TACTGTGAAA ATGTTTTACA TTCCATTICA      120
TTTGTGTGT TTTTAACT GCATTTTACC AGATGTTTG ATGTTATCGC TTATGTTAAT      180
AGTAATTCCT GCGGCCTTCA TG                                202

```

## (2) INFORMATION FOR SEQ ID NO:522:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAATTTAATG | AAGCAAAATT | CCATACATCA | TTTGTAAAAT | 60  |
| AGTGTTTCTT | TCCCTGATAG | GCCTGTTCTG | CATCATTCTT | TTAGCTTCCT | TCTGCCCTGT | 120 |
| TTATCACTTG | GTCCCACTTT | TATATTTTTC | CTCTTCGGTC | CAGAATTTCT | TATTTAGTTT | 180 |
| CTTGTATTTT | GCCTACTCCC | TCCCTTCTCC | ATGATTCAGC | CTAGTCTTTC | CGTCCCTGT  | 240 |
| GGACTTGGGT | GTGCCTTCCT | CTGGGCCACC | TCGTCTTTTG | CTGCTGTTAG | CCCTCCCGCC | 300 |
| TGCGCACCTG | CCACTTCACC | CTCGCCTGTG | GTCCACTTAC | GTTCCACTCA | GCCCGGTCAG | 360 |
| TCCTGCTTTG | TTCTTCTCCA | CCGCCTTGGT | CTCCCGTGTG | TCTTATCTAG | CTCTGGTTCC | 420 |
| TTCTCGTCTC | CACATTTATT | TGTTTTCTT  | CCTGTGCTTG | TTAGTCCTTG | TGCACTGGC  | 480 |
| CTTTTCTCG  | AG         |            |            |            |            | 492 |

## (2) INFORMATION FOR SEQ ID NO:523:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGCCTA | GGAAATTTCA | CCATTGCTG  | TCCCCCTTTG | TGGGTCAGCA | 60  |
| GGTGGTCAAG | ACAGGGGGCA | GCAGTAAGAA | GCTACAGCCC | GCCAGCCTGC | AGTCTCTGTG | 120 |
| GCTCCAGGAC | ACCCAGGTCC | ATGGAAAGAA | ATTATTCCTT | AGATTGTATC | TAGATGAAGA | 180 |
| AATGGGGCCC | CCTGGCAGCA | GCCCAACACC | AGAGCCTCCA | CAAAAAGAAG | TGCAGAAGGA | 240 |
| AGGGGCTGCG | GACCCAAAGC | AGGTCGGGGA | GCCCAGCGGG | CAGAAGACCC | TTGATGGATC | 300 |
| CTCAGGTCT  | GCAGAGCTCG | TCCCCCAGGG | CGAGGATGAT | TCTAGTATT  | TGAGAGAGA  | 360 |
| CGCCCCTGCA | GGAGATGCTG | GGAGGTGGCT | CGAG       |            |            | 394 |

## (2) INFORMATION FOR SEQ ID NO:524:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| CGATTGAATT | CTAGACCTGA | CCAAAGACCT | TCCGTACAGA | TTGACCGCAG | AATGTCAGGG | 60  |
| AAAGTTAGGA | GAAGAAGTTC | TGAGAAGACT | GACTACAGAT | TGGCTGGCCT | GGCTGACCCA | 120 |
| GGAACTTCTG | AGCAGACTGA | CCTCAGATTG | TATGGCCTCG | TTGACCACAA | AACATCTGTA | 180 |
| AAGACTCACC | ACCAAGTGTA | CGGCCAAGCC | ACTGAAGTAG | CTGAACACCA | GGCTATTGAC | 240 |
| CAAGCTCATA | GTAATGCTGA | TCAACCTCCA | GTTGACAATG | CTCACTACAC | TGAATCTGAC | 300 |
| CAGACTGACC | ACTTAGCAGA | CAGACAAGCT | AATCATAAAG | ACCAGCTGTC | TTACTATGAA | 360 |
| ACACGTGGCC | AGTCTGAAGA | CAGAATATTT | CCCCAGTTAG | GCAACAGCAA | AGAGGACAAA | 420 |
| GAGGCTGACT | ACAGAGTACA | ACCCTGCAAA | TTTGAGGATA | GCCAAGTAGA | CCTCAATTCC | 480 |
| AAGCCTTCAG | TTGAAATGGA | AACTCAGAAT | GCAACCACTA | TCCCACCCTA | CAACCCAGTT | 540 |
| GATGCCAGAT | TCACCAGTAA | ATTCCAAGCA | AAAGACCAAG | CTCTTTTCCC | AAGACTCGAG | 600 |

## (2) INFORMATION FOR SEQ ID NO:525:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

```
GAATTCGGCC TTCATGGCCT ACTTTCTTCT GCTGGCTTCC ATCTTGCCAC ACTTCTTGTC      60
TCTTCCTTCT AACTGAAAGA CTAATTCTCC ATCCCCTCTG CAGGCTCTTT TGCTCCACCT      120
GATATTTAAA TGTGGAATG CCTAGAGTTG TTCTGACCCT TCTTTATCTA CCCCAGATTC      180
CTCAGTGATC TTATGCAGAG GTCTCCCAA GTTTACATGG CTATCCTTGA CCTCCTTCCT      240
GAACTGCAGC TGGTGTGAGC TGCCGTCACT TGGATGTTTA ATCAGCAACT CAAGGTTTAC      300
GTGATGATTA GACCGCAGTT ACCCCCAGAC TTCCCTTATCC CTTAGTTTTC CCCATCTCAT      360
TAAGTTCACT TCCATTCACT TTCTTGATGA AGCCAAGTAT TTCAGAACTA GCCTTGTTTC      420
TTCTTTTCA CTTTCCCCCA TATCAATTCC AGACTACCCA CTCGAG                        466
```

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 559 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

```
GAATTCGGCC TTCATGGCCT ACATTGTAGA AGAGATCACA GAAACCACAA AAGGTTTTCT      60
GAAGTATATG GATAATCAAT CATTGCAAC TGAAAGTCAG GAAGGAGTTG GTTTGGGACA      120
TTCACCTTCA TCCTATGTGA ATACTAAGGA AATGCTAACC ACCAATCCAA AGACTGAGAA      180
ATTGAAGCA GACACAGACC ACAGGACAAC TTCTTTTCCT GGTGCTGAGT CCACAGCAGG      240
CAGTGAGCCT GGAAGCCTCA CCCCTGATAA GGAGAAGCCT TCGCAGATGA CAGCTGATAA      300
CACCCAGGCT GCTGCCACCA AGCAACCACT CGAAACTTCC GAGTACACCC TGAGTGTGTA      360
GCCAGAACT GATAGTCTGC TGGGAGCCCC AGAAGTCACA GTGAGTGTCA GCACAGCTGT      420
TCCAGCTGCC TCTGCCTTAA GTGATGAGTG GGATGACACC AAATTAGAGA GTGTAAGCCG      480
GATAAGGACC CCCAAGCTTG GAGACAATGA AGAGACTCAG GTGAGAACGG AGATGTCTCA      540
GACAGCACAA GGCCTCGAG                        559
```

(2) INFORMATION FOR SEQ ID NO:527:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 318 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

```
GAATTCGGCC TTCATGGCCT ACGCAGTGGT TCAATTTTCT TCGAAACGGT GTGGTCCCTG      60
CAAAAGGATG TTTCTGTGTT TCCATGAGCT GGCTGAAACT TGTCACATCA AAACAATACC      120
CACATTTTCA ATGTTCAAGA AAAGCCAGAA GGTAACCTTA TTCTCAAGAA TCAAAAGAAT      180
AATTTGCTGT TATAGAAGTG GATTCATGAG CAACCTGATT TTTGAGTTT GTGGAGCCGA      240
TGCTAAAAAA TTGGAAGCCA AGACTCAAGA ATTAATGTAA GCTGATCTCC AAGGC AAAAT      300
ACACTTGTGC CGCTCGAG                        318
```

## (2) INFORMATION FOR SEQ ID NO:528:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

```

GGCACAGACT TACCGGACAC ACAGGTCATG GGACACAGAG TCATGGGGCA CACAGGTTCA      60
CAGGGCACAC AGGCTCACGG GACACAGAGT CATGGGACAC ACAGGCTCAC AGGGCACACA      120
GGCTCACAGG ACACACAGGT TCATGGGGCA CAGAGTCATG GGGCACAGAC TCACAGACTC      180
ACAGGTCATA GACGCTCATG GGGCGCAGGC TCACAGGGCA CACAGACTCA GGGCACACAG      240
GCTCATGGGG CACAGAGTCA TGGGGCAGGG CTCGAG                                276

```

## (2) INFORMATION FOR SEQ ID NO:529:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

```

GAATTCGGCC TTCATGGCCT ATTCTGTTCT TAAATTGA ATGAAAGTT GGCATTTTAA      60
AAAACTTTAG GTGATTAGG AGTATAATTT TAAGCAGATT TTAGAGTAC GAGTGTCCAC      120
ATATTAACT AAACATTCAA AAATTAGTTA AAATCAATGA ACTTGGGAAG GATCCTCGAG      180

```

## (2) INFORMATION FOR SEQ ID NO:530:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

```

GGGGACAGAA GATGTGCTCC AGGTTCCCTC TGCTGCTGCC GCTGCTCCTG CTA CTGGCCC      60
TGGGGCCTGG GGTGCAGGGC TGCCCATCCG GCTGCCAGTG CAGCCAGCCA CAGACAGTCT      120
TCTGCACTGC CCGCCAGGGG ACCACGGTGC CCCGAGACGT GCCACCCGAC ACGGTGGGGC      180
TGTAAGTCTT TGAGAACGGC ATCACCATGC TCGACGCAGG CAGCTTTGCC GGCCTGCCGG      240
GCCTGCAGCT CCTGGACCTG TCACAGAACC AGATCGCCAG CCTGCCGAGC GGGGTCTTCC      300
AGCCACTCGC CAACCTCAGC AACCTGGACC TGACGGCCAA CAGGCTGCAT GAAATCACCA      360
ACGAGACCCA GGCCCTTCCG CACCGTTCAC AGTATTTTGA AGGTGTTGTG AAGTGAATA      420
AGCTGGAAT ACTGGAGACC ATCGTGGACA GAATAGTAAG AGCCCTCGAG                                470

```

## (2) INFORMATION FOR SEQ ID NO:531:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

```
GAATTCGGCC TTCATGGCCT AGAAAATTCC AGAAAGGATA TTTAAGAAAA TACAATAAAC      60
TATTGGAAAG TACTCCCCTA ACCTCTTTTC TGCATCATCT GTAGATACTA GCTATCTAGG      120
TGGAGTTGAA AGAGTTAAGA ATGTCGATTA AAATCACTCT CAGTGCTTCN TACTATTAG      180
CAGTAAAAAC TGTCTCTAT TAGACTTTAG AAATAAATGT ACCTGATGTA CCTGATGCTA      240
TGGTCAGGTT ATACTCCTCC TCCCCCAGCT ATCTATATGG AATTGCTTAC CAAAGGATAG      300
TGCGATGTTT CAGGAGGCTG GAGGAAGGGG GGTGTCAGTG GAGAGGGACA GCCCACTGAG      360
AAGTCAAACA TTTCAAAGTT TGGATTGTAT CAAGTGGCAT GTGCTGTGAC CATTATAAT      420
GTAGTAGAA ATTTACAAT AGGTGCTTAT TCTCAAAGCA GGAATTGGTG GCAGATTTTA      480
CAAAGATGT ATCCTTCCAA TTTGGAATCT TCTCTTGAC AATTCCTAGA TAAAAGATG      540
GCCTTTGCTC GAG                                         553
```

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 843 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

```
GAATTCGGCC AGAGAGGCCT ACTTCTCTTA GTGATTCAT GTTTCACCA GTACATTGTG      60
GTGAATACTG AAATATCTTG TTTAATTTCAG ATAATTAAAA TGGTGGCAAA GGAAGCTGTT      120
TAGCCAGAGC CCTTCTTGAC TTTGAGGAAC AGTGGTAGTA TAAGACTTGA AGACAGACGT      180
GTAAAAAGTA CTACTCACTG GTAGGCTCAG GTCTGGTTGA TTGACTGATT CTGAGACGG      240
AATGTCGCTC TGTGCGCTAG GCAGGAGTGC AGTGGCCCG TCTCGGCTCA CTGCAGCCTC      300
CGTCTCCGGG TCCAAGCGAT TCTCCTGCCT CAGCCTCCCG AGTAGCTGGG ACTACAGGGC      360
CCCGCCACCA CACCGGGCTA ATTTTGTAT TTTTAGTAGA GACGGAGTT CACAATATTG      420
GTCTCGAACT CCTGACCTCA GGTGATCCAC TCGCCTGGCC CACCCAAAGT GCTGGGATTA      480
CAGGGATGAG CCCCTGCGCC TGGCCTCGGT TGAATTTATT AAACAACCTT TGTGGGCAGC      540
AAGCTGTACG AGGTTAACTA TGTGATGAGA AGACTTAGAA ATGGAGAAAA GTTTTATCAG      600
TTCTACATAG GACTTAGTTT GGGAGTTTCT GGAAACTACG TTGGAAATCA GTAGTTGCAC      660
ACTAGCTGAA TTCAGCTGTG TAATTTACAG TGATTGTGTA TTTACCAAT AAGTAGAAGA      720
GGGAATTAAG AAGCTAAAAT CTCTGGGTAC TTGTTTGATA TGAATTTGTT AATTGTTTAT      780
ACTCAGGTAA TAAGTGTTAC CTCAGTCATA GCATTAAATA TTTTATCTGA CTGCTCTCTC      840
GAG                                         843
```

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 525 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACATCCAGAA | ATTTAGGGAC | TCAGCCCTGG | TCAGGGTGGC | 60  |
| AAAGGGTCTG | TTGTCTTTC  | CCCATTAGAC | AGAGGTCTTG | TCCTGCTACC | CTAATTGTAA | 120 |
| AGGGGTGCCT | GGGAAGGGGT | GGTAGGGACA | TGGTGGCGGT | GGAGACTCCG | GCCCCACTTC | 180 |
| TCCAGGCTTT | GCTGACAGGG | GCCTGCTTTT | AATTTTATT  | TTTATTCCAT | GACTTTTAA  | 240 |
| AAAAGAATCC | CGTAACCTCT | TTTTCATAAC | TTTTTTTGT  | ACTTTTCATA | ATACTGTTTT | 300 |
| CTACTTTGTT | CCCACAAGTT | TTTTTGCCAC | AACGTTTTTA | CATTTTTTAT | CCCATAACTT | 360 |
| TTTCAACCCA | TAACTTTTTT | AAATAAAGTT | ATTAAATAAA | ATAACTTTT  | ATAAAACTTT | 420 |
| AATAAAAGTT | TTTAAATTAA | CCCATAACTT | TTTATTTTG  | GTTTTTAATA | AACACTTGCA | 480 |
| TAGTTATATT | ACAACTTTGT | AAAAATGAAA | CACATTATCT | CAGGC      |            | 525 |

## (2) INFORMATION FOR SEQ ID NO:534:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGAAAACCCT | TGAAGACATG | TTGAAAATAC | ATACTCTGT  | 60  |
| TAGCCAAGAA | GAAAGATTGA | TTTCTTAGA  | CTCCATTAAG | TCCAAATCCA | AAGACTCTGT | 120 |
| GTGGGAAAAA | GAAATAGAAA | TACTTATAGA | GGAAAATGAG | GACCTCAAAC | AACAATGTAT | 180 |
| TCAGCTAAAT | GAAGAGATTG | AAAAGCAAAG | GAACACTTTT | TCATTTGCTG | AAAAAACTT  | 240 |
| TGAAGTTAAC | TATCAAGAGT | TACAAGAG   |            |            |            | 268 |

## (2) INFORMATION FOR SEQ ID NO:535:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GGCTTGCACC | TCGGCGATCC | CCGACTCCCT | TCITTATGGC | GTCGCTCCTG | TGCTGTGGGC | 60  |
| CGAAGCTGGC | CGCCTGCGGC | ATCGTCCTCA | GCGCCTGGGG | AGTGATCATG | TTGATAATGC | 120 |
| TCGGAATATT | TTCAATGTC  | CATTCCGCTG | TGTTGATTGA | GGACGTTCCC | TTCACGGAGA | 180 |
| AAGATTTTGA | GAATGGCCCC | CAGAACATAG | ACATTCTCT  | CGAG       |            | 224 |

## (2) INFORMATION FOR SEQ ID NO:536:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTTCATGGCCT | ACCACTCTGG | CCCCAGCGTC | ACTGGCCTAG | GGACACATGG | 60  |
| GGGTGGGGAT | TGTTTGGCCT  | TCCTGGCTTA | GGTCTCTGGA | AGAGAGAAGA | ACCCCATGGG | 120 |

|   |     |
|---|-----|
| GCAGACCCAG GCCACGGGCA GTACATGCCT CCCACACTAC TGACACCGCC AGTGTCTTCT | 180 |
| GTGAAGCCAC CTTTGAGCAA CGGAAAGGAA GGGGGATGGG CAAGATCAGT GCAAGGTTGG | 240 |
| CCAAAAGCCT GGGGCTGGCC TTCTGCTGGC ATGAGAGGGC CAGGCCGCCC CCAGCTCCTC | 300 |
| GAG   | 303 |

## (2) INFORMATION FOR SEQ ID NO:537:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGAACAAAAT CTGAAATTCA GAAATAAACA ACAGTTGGAA | 60  |
| AATATTTTCC ATTTTTCCTT CTATTAAATA TGATAATTTC AGGTGCAAAG AGTGTCTTTT | 120 |
| TTTTTTTTTT TTTCTCCACA GTGCTTTTCA CGGTGGGGAC TAATGGATAT AGAGGGTGGG | 180 |
| AGGCCAGAAT AACCAAGTAC CTGGAAGTGA ATCTTTGTGG AGATAATGAA ATAATTTTAT | 240 |
| TCGAAAGGTG CAAAAGGAAG TCTTCCATCA CTAGCTCAGC TGTATGGTC CTTGAACTGC  | 300 |
| CCTTGCCCGT CTGTCTTTT ATTAACTCTT TTTACCTGTC GAGTCTCGAG             | 350 |

## (2) INFORMATION FOR SEQ ID NO:538:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AGAGTTGCAC AGATGTCTTT TGTTAGCTTT GGTGGCGGAG  | 60  |
| TCATCCTCAC AGACCGTTAC TCAGATAATT AAGTGCCTTG CAAATTTAGT ATCAAATGCA  | 120 |
| CCTTATGATC GTCTAAAACCT CAGCCTGCTG ACCAAAGTCT GGAACCAGAT AAAGCCTTAT | 180 |
| ATTCGCCACA AAGATGTTAA TGTTCGTGTG TCAAGTCTCA CACTCTTGGG AGCTATAGTG  | 240 |
| TCCACCCACG CACCTTTACC TGAAGTCCAA CTACTTCTGC AACAGCCATG TTCTTCTGGA  | 300 |
| CTCGTAATA GCAATTCAGC AACCCTCAC CTCAGCCCTC CGAG                     | 344 |

## (2) INFORMATION FOR SEQ ID NO:539:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 343 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACAACTCCAT TAAACCACCA CCAGCTCCCC AAGCCACCCC | 60  |
| TTCAGCCATG AAGTTCCTGC TCCTGGTCTT GGCAGCCCTC GGATTCCTGA CCCAGGTGAT | 120 |
| CCCAGCCAGT GCAGGTGGGT CAAAATGTGT GAGTAACACC CCAGGATACT GCAGGACATG | 180 |
| TTGCCACTGG GGGGAGACAG CATTGTTTAT GTGCAACGCT TCCAGAAAAT GCTGCATCAG | 240 |

CTACTCCTTC CTGCCGAAGC CTGACCTACC ACAGCTCATC GGTAACCACT GGCAATCAAG 300  
GAGAAGAAAC ACACAAAGGA AAGACAAGAA GCAACCCCTC GAG 343

## (2) INFORMATION FOR SEQ ID NO:540:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

GCGATTGAAT TCTGAAGACC TCTCAGCCTC TTATGACCAC TCCTGGCACC CTGTCAAGCA 60  
CAGCATCTCT GGTCACTGGC CCTATAGCCG TACAGACTAC AGCTGGAAAA CAGCTCTCGC 120  
TGACCCATCC TGAAATACTA GTTCCTCAAA TCTCAACAGA AGGTGGCATC AGCACAGAAA 180  
GGAACCGAGT GATTGTGGAT GCTACCACTG GATTGATCCC TTTGACCACT GTACCCACAA 240  
ATCTCGAG 248

## (2) INFORMATION FOR SEQ ID NO:541:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

GAATTGGCCT TCATGGCCTA GATTGTCTTT ATAGGAAATG TCTTTAGCAA AATACTACGG 60  
GTTCTATAAA ACCCATTAAC GGGTTATCAG TGTCTAGGAC ATAAATGGCT TCTGGTAAGA 120  
AAATTAAGGT CTACTCTCCC TAAATACTAT CATAATTACA AAGGTTAAGA AAAAGAAGT 180  
AGAGTAAAC ATGTGTCCCT TAAAAATCAA ACATGAGTGG TCACAAGGTC CTAAGAAGCA 240  
GAGAA TGAGA ACTCCAGTTG CTTGTTTATC TCTCAGGCTG AGCATGGTTG GTTACAATGA 300  
GGGGTAGCAG GAAGAGCACA GCCTTGGACT CCAGTCCAAG GAACTCCAGT CTCTCCTGCA 360  
ATTTCCAGT GTTTGACCTT GGGCCACTTA CTGTTCCTTT CTCAGCCTCC ATTTTCATAT 420  
CTAAACCTC GAG 433

## (2) INFORMATION FOR SEQ ID NO:542:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

GAATTCGGCC TTCATGGCCT AGACACGGGA CATAAAAACT TTTAATGAAG GAGGACACAG 60  
CTCAGAGCCC TTCCACATGC GGCCCAACCC TGCCCCACGG AGACCGGCCA TGGCAACCGC 120  
TCAATCAGAA GGTGTTCTTG ATGCGGCCGG CCACCAGCCT AAGGATGTCC CCGATCTTCT 180  
TCTGCCAGTT GCGGATGTCC TTGGACACGG CGCACCACAG CTCCCCATGC CGAGGCTCTG 240  
CACTCTCACA GCGCTTCCTC ACCTCCTCCT GCTGCTCCTC AGTGCCATGC TGCAGCTCAA 300

```

ACTTGTAGAA GAAGGCCAG GCATCCCCA GGTCCGAGTC AATCTTCACA GTGCGGTGGA      360
ACCACTCCCT GGCCTTGGTG ATCTTCCGCT GACTCCAAAA CAGCTTGGCC ACGGCCAGGA      420
GCACATGGGG GTCATGCTCA CACTTCTTCA GGCATCCAC GCTCTTGCTC CTCCTCTGGG      480
GCCTTGCTC GAG                                                         493

```

## (2) INFORMATION FOR SEQ ID NO:543:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

```

GAATTCGGCC TTCATGGCCT AGTCAGGGAG AAGGGAAGGT GAGAAGGGGG GGAAAAAAGA      60
AGCAAAAAGC CCAAGAAAAA AAACATTTTA TATTCATCTG TATAAACATA TCCGCTAAGG      120
CAAACGCAAT CCGGGTCCGA GGCTGCTGCG CTGGGCTCGG TGCCTCCTAA TTTCTGCAGA      180
TTCTAAGGCC AAAAATAAAA ACCTCTGCAA GTCCGCGTAG CTCCAGGAC TCCTGGGCAT      240
TTTACTAAAA TAAAGAGTTA TCGAGTTTAA AAAGCAGTGA CGTCGTTATG ACACACACTG      300
AAAGTTGCAT AACTGTGGCC TCGAG                                         325

```

## (2) INFORMATION FOR SEQ ID NO:544:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 473 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

```

GAATTCGGCC AAAGAGGCCT AAGAATTCCT TATGAAAGTG ATGCTTGAGT CAAAATATGA      60
TGGATGAAGA GAGTTTAAAT AGATTACATA GAATTTTAA TAATGTCGAT TGGTTATATA      120
CTGGGCACTG ATAGCTGATT TTTCTTTGGG GAAAGGTATG TCAGCCTAGT CATTCAGATT      180
CCTTTATTTT TTAAATGTT TTTTCATTTT TTGCTTTGCA TTGCATTCAT TTGCTGAAGA      240
GCTGGCTTGT ACTTTGGCAG GTGTCATACT TGGTTATCT CCTTAGGATA TTGGCCCAAC      300
AATCTGGGAT TTGTGAAAGG CGCTTCGCTT TTCAGACCTG GCGCTCTGTA TCATGACTAT      360
CATAAATTA GGATTAAGAC ACCTAGCCTC CTACCAGGAT GAATGAGGTG TCCATGTGAC      420
CTGCTGTGCC CTGGAATTTT ATACATCTTT CTCTCATAGC ACACGGACTC GAG          473

```

## (2) INFORMATION FOR SEQ ID NO:545:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 120 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGAAG GAAGAGGGAA GAAGAAAAAC TATAAAAGTG      60
TGCTAAATGT TTTATTTTCT CTGGAAGAAT AGTTATATTC TACTCTTTGT GGCTCTCGAG      120

```

## (2) INFORMATION FOR SEQ ID NO:546:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

```

GCTAGACCTG CCCCTTAGA AATGGAAAA GCATGCAAGA GAGATGTTAA AGGAGACTAT      60
TGGAGCAACT GTGTCCACAC CCTCTGTGAT AGAAATGGAA AAAATATCCC CAGAAGATCG      120
TGGTGAGAAT ATTGGGAAAC ACAAGTGTT ACCCGCAGTG GTAGACATTG AGAAAATACA      180
TGGAAACAGGA CTAGAATTGA CCACTAAACA AGGGGAGGCC ATGCTTCCTG CATTGAAAG      240
TAAACACCA CAAGAGTATG CTGAAGGGAG TGTGAAGAA ACAATGGAAA ATACTACCA      300
AAAGGATGCT GAAGGGGATA TTGAAAGGC TGAAGTGATG CCTGTGAGGT TAGAAATGGA      360
AAATACTTAC CCAAAGGATA CTGAAAGAGA CGGTGGCAAA ACTGAGGTGA TGCCCTTGC      420
ATTAGAGGTA GTAAATACTT ACCAAAAAAA TGCCAAAGGT TTTACCGGGA ACAATCTCGA      480
G                                                                                   481

```

## (2) INFORMATION FOR SEQ ID NO:547:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

```

GAATTCGGCC AAAGAGGCCT AGAAACCTGA GGCTGCTGCC CTTTATCTGC CTTACGGTA      60
CTGTCCCCTT CCCCAGCTC CTCCCTGACC CCATGGGCCA GGCCTCAGAC CTTCCAGCTA      120
ACCGCTTCCC ATGAGCCACT ACTCTGATGT CAGCCTATAA CCAAAGGAGC TGGGGGGTCC      180
AGGCCTGGTG ACCAACCTTT CTCAGCCAC TCAATCAGGG TGCTCCCCAC CTGCAGGCAG      240
GAGGCAACAC CCTATCTGCT ACCATCAGCC CCTCCAGAG CCCATCTGCC CCGCCCAGCC      300
CTGCCCTGCC CAGCCATACC CTGCTCTGCC CCATCTGGGG GTGCCCTGCT CAGGGATGGG      360
CTGGCAGGGC TGTACCCAGC CTCCCTGGTA AGCAAAGAGC TCGAG                               405

```

## (2) INFORMATION FOR SEQ ID NO:548:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

```

GCGATTGAAT TCTAGACCTG CCTCCCTGCT TTCTAATAAA TCTGACTAAC CTTAGACATT      60
TTGTATCTTA CTAAGAACAT CCCTTCAATA TCTACTTCAT TATCCCATGC CATTTCCTCA      120
CTGTCTCAAC ACGAATCTCG AG                                                                                   142

```

## (2) INFORMATION FOR SEQ ID NO:549:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

```

GAATTCGGCC TTCATGGCCT ACTATGGTAT TGCTAAACAA GGGTGGGAGG AGAGAGAGGT      60
AATCAGGGAG GACTTCCCAC AGGAGGTGGC ATCTGCAGAT GTCTCAAAA AGAAAAGAAT      120
TAGCCTGGCA AGAGGTGAGG ATTGTGTAGA GGTCACTCAC TTTCCTTGTG GGTGGAGGAA      180
ACCATTCCAG GAGCTGTAGG AAGCTTGGTG CTGGTGAAGG AGGCAGGAGA GGAGAGAAGA      240
GGAGATGACC TTAGAAATCA CATCCAAGAG CCTCTGATCC CAGGAGGCAG CTCGAG      296

```

## (2) INFORMATION FOR SEQ ID NO:550:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

```

GCAGGAGAGA AAATTGAGGC TTAGGTTAAG AAAGTACCC AAAGTCAAAC AATTTAATTG      60
GTTTGGGAAG ACCAGGAAGA CTTTAAGTTC CTAAGATCGT TTGAGATTCT GCATCAGGGA      120
ACACTTGACA GCAGGTTTAT ACAAAGACAG ATTTGGTATC TTGGAGGGA ATGAGTTTCC      180
AGTCATTGCA GGTGGTCCAG CAGAGAGGGC CACTCTCCTT TTTTCTTTC TTTACTCCCT      240
TTTTGATTCT CGAG      254

```

## (2) INFORMATION FOR SEQ ID NO:551:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

```

AGGCCATGAA GGCCCTTTCC ATTTCTTTT GTTCCATCAC TCTTCTCTCA ACCTGTGTTT      60
CTTTTTTTAC TGAGGAGTTA GTCCCCATTA GTTCTTGTAT CACATTTTCA TTTGCACGAC      120
ATTACTCGCA GGTGGTGGGG AGCCTGGGCT TTTGGGGAAC CAGGCTGCTC TGGTCCCCAG      180
CATTGCCTCC TCCTAGCCCC TCTAGTCCAG TTTGCCTCCC TTACCCTCAT TTTCCAAACC      240
TCTTGTAACC TCCTCTCCCT CCCCAGCTG GCCTCGAG      278

```

## (2) INFORMATION FOR SEQ ID NO:552:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

```

GAATTCGGCC TTCATGGCCT ATGCACTTCT TCTTTCTCTC CTCCTTTTGC TGGGTGCTTA    60
CCGAGGCCTG GCAGTCCTAC CTGGCTGTCA TTGGGCGGAT GCGCACCCGC CTCGTTCGCA    120
AGCGCTTCCT CTGCCTGGGC TGGGTCTGCT CTGCCCTGGT GGTGGCCGTG TCTGTGGCT    180
TTACCCGAAC GAAAGGATAC GGTACATCCA GCTACTGCTG GCTCTCCCTG GAGGGCGGCC    240
TGCTCTACGC CTTTGTGGGC CCTGCAGCCG TCATTGTCCT GGTGAACATG CTCATCGGAA    300
TCATCGTCTT CAGCAGCTCG AG                                     322

```

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

```

GCCAAATCA AGCAAAGTAT GAAGAAAGAT AAAGAAGGGG AAGAAAAAGG GAAGCGAAGA    60
GGATTCCCCA GCATCCTGGG ACCCCCACGG AGACCAANCC GTCATGACAA CAGTGCAATT    120
GGCAGAGCCA TGGAACTACA GAAGGCGCGC CACCCTAAGC ACTTATCCAC ACCCTCATCT    180
GTGAGTCCTG AACCTCAGGA CTCTGCCAAG TTGCGCCAGA GTGGGTTAGC AAATGAAGGA    240
ACAGACGCTG GATACCTGCC TGCCAATTCC ATGTCTTCTG TAGCTTCAGG GGCTCTTTT    300
TCCCAGGAAG GAGGGAAAGA GAATGATACA GGATCAAANC AAGTTGGAGA AACATCAGCA    360
CCTGGAGACA CCTTAGATGT CACCCTCGAG                                     390

```

(2) INFORMATION FOR SEQ ID NO:554:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

```

GACGGCTACA CCATGGGCCG GCTGCTGCGG GCCGCCCGGC TGCCGCCGCT GCTTTCGCCG    60
CTGCTGCTTC TGCTGGTTGG GGGAGCGTTC CTGGGTGCCT GTGTGGCTGG GTCTGATGAG    120
CCTGGCCCAAG AGGGCCTCAC CTCCACCTCC CTGCTAGACC TCCTGCTGCC CACTGGCTTG    180
GAGCCACTGG ACTCAGAGGA GCCTAGTGAG ACCATGGGCC TGGGAGCTGG GCTGGGAGCC    240
CCTGGCTCAG GCTTCCCCAG CGAAGAGAAT GAAGAGTCTC GGATTCTGCA GCCACCACCA    300
CTCGAG                                     306

```

(2) INFORMATION FOR SEQ ID NO:555:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

```

GAATTCGGCC TTCATGGCCT ACCCTCTCAC GCCACCCCG CCCCACCGG GCTGCAGGTG      60
CTGCTGATGC GCTGGGATCT GATTGAGGAT AAAAAGGAAG GAGAGATGAC CCCTACCCCC      120
TCATCCCCCA GTTTGAAAA GGTCTAAGCA AGTGAGTCTG GTGGAGGAGC TGAGGGAGGG      180
AGCCATGGAA GGTGCCAGAA GGAAGGTTGG CGGGGGCAGC TGTGGGCCGT GGCTTGGGCT      240
GGTCAGAGTG GCGTGAGCTG CCCGGCGCCT GCCCTGCCCA AGTGACCAGG GAAGTGTGTG      300
TGTGTCCATG TGTATGCGTG GCTCGAG                                     327

```

## (2) INFORMATION FOR SEQ ID NO:556:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC TTCATGGCCT AGAGAAGGAG CCAGCTGGGG CCGAATCCAT CCGCTTGAAC      60
ACCAAAGAAG ACAAAAATGG TGTCCCGGAC TTAGTGGCCC TGCTGGCTGT GAGAGACACC      120
CCGGACGAGG AGCCGGTGGA CAGCGACACT TCGGAGAGCG ACTCGCAGGA AAGTGGGGAC      180
CAAGAAACAG AGGAGTTGGA TAATCCTGAG TTCGTGGCCA TTGTGGCCTA TACCGACCCG      240
TCGGACCCCT GGGCCCGGAA GGAGAACTCG AG                                     272

```

## (2) INFORMATION FOR SEQ ID NO:557:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

```

GAATTCGGCC TTCATGGCCT ATTTCCGATC TATGTATCTG TACTCATACA GCCTCATCGG      60
GCTAAACAGC CTTCTTTTCA GAACAGTAGA TCACTCAACT GGGTTTTCAA GTGACTGTTT      120
ACCTTTCAAG GCTGGCTTTA TAGGTCTTGC CTCACTGTAT CCAGCAATCC AAACCTTTACC      180
CTATCCCACT CAGGACTGCA CACCTCATAT TGAAAGACAT ACCTTAGAAC CAGACTCCCC      240
AAACCTTACA AATATCCAC CTTGACTCC CGTTCTCGAG                                     280

```

## (2) INFORMATION FOR SEQ ID NO:558:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

```

GCAATGGTCT CCAGGATGGT CTCTACCATG CTATCTGGCC TACTGTTTGG GCTGGCATCT      60

```

```

GGATGGACTC CAGCATTGTC TTACAGCCCC CGGACCCCTG ACCGGGTCTC AGAAGCAGAT      120
ATCCAGAGGC TGCTTCATGG TGTATGGAG CAATTGGGCA TTGCCAGGCC CCGAGTGGAA      180
TATCCAGCTC ACCAGGCCAT GAATCTTGTG GGCCCCCAGA GCATTGAAGG TGGAGCTCAT      240
GAAGGACTTC AGCATTGTTG TCCTTTTGGC AACATCCCCA ACATCGTGGC AGAGTTGACT      300
GGAGACAACA TTCCTAAGGA CTTTAGTGAG GATCAGGGGT ACCCAGACCC TCCAAATCCC      360
TGTCTGTGTG GAAAAACAGC AGATGATGGA TGTCTAGAAA ACACCCCTGA CACTGCAGAG      420
TTCAGTCGAG AGTTCAGTT GCACCAGCAT CTCTTTGATC CGGAAACACT CGAG          474

```

## (2) INFORMATION FOR SEQ ID NO:559:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

```

GAATTCGGCC TTCATGGCCT AATTTTTTTG TTGTTGTTTC CTTTTTGTAT TTTACTGATA      60
TCACCAGGAT AGTTTACTCT CCTTCTAGCT TTCTGCTTAC CGCACACTGG ATAACACACA      120
CATACACACC CACAAAAATG CTCATGAACC CAATCCGGAG AAGGTTCCAG CAGGTCCTCC      180
ACCCTCCCTC CCTCCTCCTA CTTCTCCTCT TGACAGCGAG GACAGGAGGG GGACAAGGGG      240
ACACCTGGGC AGACCCGCCG GCTCTCCCCC CACCCACCC CGTCCTCGAG          290

```

## (2) INFORMATION FOR SEQ ID NO:560:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

```

GTGTATGTGG GGGGTAAGTG TGTGTGTGTG CGTGTGCGTG TATGTGCACG TGTGTGTGTG      60
GTGCGCCTGC ACACGGAGAG CCCACTCATA CGTAGCAGAA AATCAAATGG CCCCAAATCA      120
GAAACATGGC GCATGTGAGC ATGCCACTTC TTGTGTGCCT GTGACTGTTC AGAATGTACA      180
CGGCCCTGCA GCTCCCGAAG GCCAGCTCTG CTGCAACCCC TCCTCTGTCC AACACAGTCC      240
TCACTGGTGT CTTTCTCTCT TCAAATCTAC AGCATTTCTG ATCTCTGCAA ACAATTTAAC      300
CCAAAACCAA GTTCTGGCTG ACAAGGCTAC ATCTTGTTC TTGTGCGTGA TTAGCCTCGA      360
G                                                                 361

```

## (2) INFORMATION FOR SEQ ID NO:561:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

```

GTTCTAGACC TGCCTCGAGA TATGCCGGA GGTTCATGG CTGGTCCCAG GGCCAGCACA      60

```

```

GGCCCCGAGGC CGGGCTGCCT GGTTTTATTT TTATTAACT TTATTTCTG TTTTATGAGT 120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC 180
CTGCCTCCCA GCCTCTCCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG 240
CAGAGGGCGG ACCGGGTGGG CAGGGGCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT 300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCCTTT TAAAACAAAA TGCCCTCGTT 360
TGTAACCCCT TAACGCTCGA G 381

```

## (2) INFORMATION FOR SEQ ID NO:562:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

```

GCACTCATAA AAATCTTACT CAGAAATCTT CAGAGGTTTG CTAAGGATAC AATTGATTC 60
TTACACATTT AATGCTCACC AGCTGCTTAG GCCCACACCA TTTATCCACC CTGATTTGCT 120
ACTGCTCTTT GAAATACAAC CAGTGTTC A GCCAGACTGT TTTCTGCTT CTGCTCCCTT 180
TCTCCTCCTC CCAGCACATC TGTGAATTCT TTGACTGGTT TACCACTCCC AACTCCTCC 240
CCAGCAATGC AGATCTTCTA CACCCTTAG GATCTAAGCT AAGTCTGCTT CCCAGATATC 300
CTCCGAACA GCTCGAG 317

```

## (2) INFORMATION FOR SEQ ID NO:563:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 472 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

```

GAATTCGGGC TTCATGGCCT ACTTTAATGA GATAGGAACT AGTATATTCA CCGTCTATGA 60
GGCCGCCTCA CAGGAAGGCT GGGTGTTCCT CATGTACAGA GCAATTGACA GCTTTCCCGG 120
TTGGCGTTCC TACTTCTATT TCATCACTCT CATTTTCTT CTCGCCTGGC TTGTGAAGAA 180
CGTGTTTATT GCTGTTATCA TTGAACATT TGCAGAAATC AGAGTACAGT TTCAACAAAT 240
GTGGGGATCG AGAAGCAGCA CTACCTCAAC AGCCACCACC CAGATGTTTC ATGAAGATGC 300
TGCTGGAGGT TGGCAGCTGG TAGCTGTGGA TGTCAACAAG CCCCAGGGAC GCGCCCCAGC 360
CTGCCTCCAG AAAATGATGC GGTATCCGT TTTCCACATG TTCATCCTGA GCATGGTGAC 420
CGTGGACGTG ATCGTGGCGG CTAGCAACTA CTACAAAGAA GAAACCTCG AG 472

```

## (2) INFORMATION FOR SEQ ID NO:564:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 411 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

```

GCCGCGATGT TCCCCCTTCG GGCCCTGTGG TTGGTCTGGG CGCTTCTAGG AGTGGCCGGA      60
TCATGCCCGG AGCCGTGCGC CTGCGTGAGC AAGTACGCTC ACCAGTTCGC GGACTGCGCT      120
TACAAAGAGT TCGGTGAGGT GCCGGAAGGA CTGCCTGCCA ACGTGACGAC GCTTAGTCTG      180
TCCGCGAACA AGATCACTGT GCTGCGGCGC GGGGCCTTCG CCGACGTCAC ACAGGTCACG      240
TCGCTGTGGC TGGCGCACAA TGAGGTGCGC ACCGTGGAGC CAGGCGCACT GGCCGTGCTG      300
AGTCAGCTCA AGAACCTCGA TCTGAGCCAC AACTTCATAT CCAGCTTTCC GTGGAGCGAC      360
CTGCGCAACC TGAGCGCGCT GCAGCTGCTC AAAATGAACC ACCACCTCGA G      411

```

## (2) INFORMATION FOR SEQ ID NO:565:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 270 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

```

CACTCAGAAC CCTCAGACTT TCAAAGAGCC AGGAAATCGG TATAAAATTT TTGAGATAAC      60
ATTAATTAAG CTTTTGCGAG TTTTCTCTAG GACCAGATTA AACAGAAGTT TTCCTTTACA      120
GTATTCATTA TGGTTGGTAT CTCCAGAGTT CATCCTTTTT TTGTGGTACT GGGAAAAGTT      180
GCAACATTTA CTTTTCAGG GACATGGATG GAGCTGGAGG CCATTATCTT TAGCAAACCTA      240
ACACAGAGCC AAAGACAAA ACCACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:566:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

```

GTTCTGTGTT ACTAACGGCT CATCTTTTCC TTGTTTTTGT TTTTTTTTTG TTCTTTTTTT      60
CCATGTCACT AAAGGCCAAA ACTGGAACCA AGGATTTAAT AACTATTATG ATCAAGGATA      120
TGGAAATTAC AATAGTGCCT ATGGTGGTGA TCAAACTAT AGTGGCTATG GCGGATATGA      180
TTATACTGGG TATAACTATG GGAACATATG ATATGGACAG GGATATGCAG ACTACAGTGG      240
CCAACAGAGC ACTTATGGCA AGGCATCTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:567:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

```

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTCTTTT GGATTAGATT ATATAAATC      60
AGAAGAGGTA GAACCAAGCC CCAAGCACTC CTTTTCTCT GCATGATACT TCTGCTTATT      120
GTCCTTCACA CTAGCTACAT GATTTATAGT CTGCTCCCC AATATGTTAT GTATGGAAGC      180

```

CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCTT 240  
TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGGACG 300  
CTCGAG 306

## (2) INFORMATION FOR SEQ ID NO:568:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 253 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GGTGTTCGCG CACAGTTCGG GACCTATGGT AGAAAAATAC TCAGTAGCTA CCCAGATTGT 60  
AATGGGTGGC GTTACTGGCT GGTGTGCAGG ATTTCTGTTC CAGAAAGTTG GAAAACTTGC 120  
AGCAACTGCA GTAGGTGGTG GCTTTCTTCT TCTTCAGATT GCTAGTCATA GTGGCTATGT 180  
GCAGATTGAC TGGAAGAGAG TTGAAAAAGA TGTAAATAAA GCAAAAAGAC AGATTAAGAA 240  
ACGAGCTCTC GAG 253

## (2) INFORMATION FOR SEQ ID NO:569:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 544 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

CACAGTGCTG GCTCACAACA AGATGCTCAA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC 60  
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTC 120  
GGACGGCGGT NATTTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA 180  
GGAAGTCGGA CAGTGGAACA AATTCCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG 240  
AAAACCCCTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAATGTAG 300  
TCGCCATAAA GTATGCATTG CTCAAGATTC TCAGACTGCA GTCTGCATTA GTCACCGGAG 360  
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT 420  
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGCCCT GTTTGTGGTT CAGATGGTCA 480  
TACCTACTCT TTTCACTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT 540  
CGAG 544

## (2) INFORMATION FOR SEQ ID NO:570:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 330 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

GAATTCGGCC TCATGGCCTA CATTAAAGAA AAGCTTCCCA CACATCCATT TGAAGCTGAT 60  
CTCCTTGAGA TGGCAGAAAT GATTGCAGAA GATGAAGAGA AGAAGACTCT ATCTCAGGGA 120

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAGTCCCAA  | CTTCTGAACA | CGAACTCTTT | CTAGACACCA | AGATATTGTA | AAAAGACCAA | 180 |
| GGAAGTACAT | ACAGTGGTGA | TCTTGAATCA | GAGGCAGTAT | CTACTCCACA | TAGCTGGGAG | 240 |
| GAAGAGCTGA | ATCACTATGC | CTTAAAGTCA | AATGCTGTGC | AAGAGGCTGA | TTCAGAATTG | 300 |
| AAGCAGTTCT | CAAAAGGGGA | AACCCTCGAG |            |            |            | 330 |

## (2) INFORMATION FOR SEQ ID NO:571:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 312 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAGGGAAAAC | ATTTTGCATG | TGTAAAGCTT | CATGAAGTTC | 60  |
| TCTTTAAAAA | ATACCAAAGC | TGTTTATTT  | CTGATAATTA | ACCTAAGCCC | TTATGAAAAT | 120 |
| AAACAAATG  | AAGGGATTAT | GACAGGTATT | ACCAAAAACA | CCAAAAGGAA | CAAAGGGGCC | 180 |
| TGCGTTAAAA | CCTAATTGCT | AATGCTTCAC | AACTAGGAGA | GCATGCCGTC | TTGATGTTTA | 240 |
| AAAAACCCAG | GGTCTCCACC | CTTCCTTTGA | TTTGTGCAAT | TCTGTCTTCC | ACAGTTCGGG | 300 |
| AGCTTACTCG | AG         |            |            |            |            | 312 |

## (2) INFORMATION FOR SEQ ID NO:572:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 391 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| GAAATGTTC  | ATGGCCGCAG  | CAGGAGTAGA | GGTCCTGAGC | CTCCTATTTT | TCTGCATCTA | 60  |
| CTGGGGTCAA | TATGCCACCG  | ATGGCATTGG | CAACGAGAGT | GTGAAGATCT | TGGCCAAGCT | 120 |
| GCTCTTCTCC | TCCAGCTTCC  | TCATCTTCCT | GCTGATGCTT | ATCCTCCTGG | GGAAGGGATT | 180 |
| CACGGTGACA | CGGGGCCGCA  | TCAGCCACGC | GGGCTCCGTC | AAGTTGTCTG | TCTACATGAC | 240 |
| CCTGTACACG | CTCACCACATG | TGGTGCTGCT | CATCTACGAG | GCGGAATTCT | TTGACCCAGG | 300 |
| CCAGGTACTG | TACACGTATG  | AGTCGCCGGC | CGGCTACGGG | CTCATTGGAC | TGCAGGTGGC | 360 |
| GGCCTACGTG | TGGTTCTGCT  | ATGCTCTCGA | G          |            |            | 391 |

## (2) INFORMATION FOR SEQ ID NO:573:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCT | TCATGGCCTA | AAAAAACTC  | CAGAAAAAAA | CAACAGCGCG | GTGGTGGGGT | 60  |
| TTTGTTAATT | TCGCCTTTTT | TTTTTTTTGC | ACGCGCCACG | AAATTCAGGC | TGCGTTTAGC | 120 |
| TCCTGAGAAA | TATCCAAAGT | AATTGCAGAT | TGCGGAGACG | CACAGCATTG | GTTCAAAAAA | 180 |

|   |     |
|---|-----|
| GACCCGAGGC ATTGGGGCAG GGTTAGGTGG AGGGCACCGG AGGCTCTACA CAAGAAAAGC | 240 |
| AGGAACCTGC AAACCCACGT AGATTTCAC TACAACCTTC CCTTTTCTTC TGGCTAGCCA  | 300 |
| TCCAGCGCTC TCCATGGCAC TGCATGGCAC AAGTTGCTTC TGATAGTCTT TTAAGTTTGC | 360 |
| TAAGGGAACCT CCTCGAG   | 377 |

## (2) INFORMATION FOR SEQ ID NO:574:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACAGCCTCAA GTCACCTCCA AGCCCCCTCC TTGTCTGTGC | 60  |
| ATCCGGGGGC AGCTCTGGAG GGGGTTTGCT GGGGAACTGG CGCCATCGCC GGGACTCCAG | 120 |
| AACCGCAGAA GCCTCCCCAG CTCACCCCTG GAGGACGGCC GGCTCTCTAT AGCACCAGGG | 180 |
| CTCACGTGGG AACCCCTC CCACCTCGC GAGTCTGTTT CCAAGGAGGA GAAGGAGCAG    | 240 |
| AACTATGACT TAACTGAAGT CTCAGAGAGC ATGAAAGCTT TCATATCCAA AGTCTCAACC | 300 |
| CACAAGGGAG CAGAGCTGCC TCGAG                                       | 325 |

## (2) INFORMATION FOR SEQ ID NO:575:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACTCAGCCTC CCTAATAGCT GGGATTACAA GCGTGAGCCA | 60  |
| CCACACCCCG CTGGGAAATA TCTTAAAAGA ATCAAAATAA GAAAGTTACT CTACTTAAAT | 120 |
| CGTGTGCTTT TTCTGTGTGT GATTTATGGT AATCTTACCA TGGGGTATCT GATTACTTTA | 180 |
| GAAAGATCCA TTTAGCTTAT TTTTCTTTC TTTGGGTAT TTTTCTTTC CTTCATTTC     | 240 |
| CACAGCCTCC CCCCAAATAA AAAATAAAGA TATAAAGTCT ATCTTCTCCC TCTTGTCAGT | 300 |
| TTAAGTAAA AGAACTTTTG CTTCATTTT AATAATAGAA TTTGTGTGTA TATAATATAG   | 360 |
| GCAGTGATT GGCCTCAAGC TGAGTTTAGA TTTGAAAAGA TGAGAATATT AAAGCTTGTC  | 420 |
| AGCCAGCCCA CTCTCGAG   | 438 |

## (2) INFORMATION FOR SEQ ID NO:576:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACTGTNTTCC ATAAAGGCTG TACTAATTC CATTCTCACC  | 60  |
| AACAGTTCAC TAGGGTTCCT TTTTCTCCAC ATTGTTGCCA ACATTCTTTA TCTTGTGTTT | 120 |

```

NTTAATAACA GCTATCCTAA CAGGTATGAG GTGATCTCTC TCATTGCGGT TTTGATTTC 180
ATTCCCTAA CGGTTGGTGA TACTGAGCAT TTTGCATAC ACCGGGTCAT TTGTCTTTG 240
TTGTTGACTT GAGTCCCTTA TATAGTTTGG ATACTGCTGT GGCCTGAATG TTTGTGTCCC 300
CCAAAAATTC GTATATTGAA CTCTCATCCC TAAGGTCAAC AGTTTAGGGA AGCGATTAGG 360
TCCTGAGGAC TCTGCCCTCT TGCATAGAAT TAGTGCTCTT ATAAAAGATG CCCGAGGGAG 420
CTCTTTTGCC CCTCCTGCCA TGTGAGGACA CAGCTAGAAG CTACCATCTG TGAACCAGGA 480
AGCCCCCTC ACCAGACACT GTATCTCGAG 510

```

## (2) INFORMATION FOR SEQ ID NO:577:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

```

GAATTCGGCC TTCATGGCCT AAAAAATAAA AATAAAATAT ACAACCAAAG GCAGTATTCA 60
CAGAGGTATT TCTTGGGAAT AAAAGAAGGA ATATAGTCAT TCCTTGGTAT TCTCTTTGGT 120
GTCCAGAGTT ACTTAAAAAT TCTTGGTGTT TATTGCCCTT TAGTCACAGG GATACACCTT 180
TTATTCATTT ATTTATTTAT TTACCAGTCT CATTTAGCAG TAGGAATGCA TCTTAGCATT 240
TTTATACTGC TGCTCAACAC AGTGCTTTCA CTCGAG 276

```

## (2) INFORMATION FOR SEQ ID NO:578:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

```

GAATTCGGCC TTCATGGCCT AAATCCTTCC AGATGTCCTG TGAAAATGTT TGAATGCTAC 60
TTGCTTAAAA GTCCACAGAA TCTTAATCAG AGGATGGATG TTTTATTTT GCAACCAGAA 120
TGCTCTAGTT CTACAGATAG CCTGTCTGG TATACGTCTA CTTCAGTGA CCGAAACACC 180
TTGGAAAATA TGCTTGACG GGTCTTCTA GTAAAAGATA TTTATGATAA AGACAATTAT 240
GAACTGGAGG AAGACACTCG AG 262

```

## (2) INFORMATION FOR SEQ ID NO:579:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

```

GAATTCGGCC TTCATGGCCT AATTTAGGAC CATTAAAGAG AGTTTGACTA AGAAAGAGCT 60
GTTTGAAACC TCCTGGCTTA TGTATTTTGA GGGGTGTGGT GATCGAGGCT TTCTCCTCTG 120
AGTAGAGTTT GTGCATTTC AGTATAAGAT TATCATTATC AAACATTCCT ACTAGGCCTT 180

```

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| TCTCCTCAGC | CCCTAAAAAA | ATATGTATAG | TAATGAAGTA | GGAAGATCAT | GTTTATATTT | 240 |
| GACTTCACAA | ATTCTTCAGG | CTAAGTTGCT | TTCTACTGGG | GTGTGGCTGG | AGACAAAAAT | 300 |
| TACAGGTAAG | ACTTGACTTA | ATTTTGATA  | GGGAGGTTCT | TAAGAGGCTT | TTTCGGAATC | 360 |
| ACTCACCTCG | CCCCTTCCA  | TGCAGGGATG | TGGTGAGAGC | CCTTCAGTCT | ACTTAGGAAA | 420 |
| ACCTGGCACA | TGACTCGAG  |            |            |            |            | 439 |

## (2) INFORMATION FOR SEQ ID NO:580:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGATATTCTC | AGGGTCATCA | AGACTCCTGA | GATAGCAAAC | 60  |
| TTGGCCTTGC | TTGGCTTTGG | AGATATCTTT | GCCCTGCTGT | TTGACAACCG | CTACCTGTAC | 120 |
| ATCATGGACT | TGCGGACAGA | GAGCCTGATT | AGTCGCTGGC | CTCTGCCAGA | GTACAGGAAA | 180 |
| TCAAAGAGAG | GCTCAAGCTT | CCTGGCAGGC | GAAGCATCCT | GGCTGAATGG | ACTGGATGGG | 240 |
| CACAATGACA | CGGGCTTGGT | CTTTGCCACC | AGCATGCCTG | ACCACAGTAT | TCACCTGGTG | 300 |
| TTGTGGAAGG | AGCACGGCTG | ACACCATGAG | CCACCAGCCG | CTCGAG     |            | 346 |

## (2) INFORMATION FOR SEQ ID NO:581:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 740 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGACCTGCCT | CGAGATTGCC | ATCTTGGTTT | TGGTGGGTTT | 60  |
| CGGCCGACTT | CTTTGCCACT | TGCTATTTTA | TTTCTAGGT  | CTTTGTGCCC | CGTATTGTGT | 120 |
| GCTGAACTCC | NGTCTCATCC | TGTGACTAAG | ATTGCCTAAC | CTCCTGGGAA | TGCAGCCCAG | 180 |
| TAGATCTCAG | CCTTACTTTA | CCTAACCCCT | TTTCAAGATG | GAGTCACTCT | GGTTCAAACA | 240 |
| CCTCTGACAT | TCGCAGTGGA | ATCCATTAAA | AGATGTTAAG | GAGATATGAT | TATATTTCTA | 300 |
| AATTGTCACT | CCAGCATCCC | CTACGCCAGA | CATTATGCCA | GTCTCTATCC | ATACAGTATC | 360 |
| TCATTTAATC | CTCCCGTCAT | TAATCTCATT | TTACCAATGA | GTAACCTTGA | AGCAAATGAG | 420 |
| TGACTTTCTC | AAGGCTACCT | ACTTACGCCT | TACCAGGGCC | AGGATTCAAA | CCTAGACTTG | 480 |
| TTCAGCGACA | GAACACACAC | TTAACCATCA | CCCACTTAGG | CCATGAAGGC | CGGCCTTCAT | 540 |
| GGCCTAAACT | GCTGTTATTT | TGGATTATAT | GGAGTTATGA | AAATCTAAAT | GTTTTACAAA | 600 |
| GTTAAAAAGT | ATTCTTTT   | TGCTCACTTA | TAACTCAAAA | ATCACTAAAG | TCATTCTGCT | 660 |
| AAACATGCCA | CGAAGCCAAG | CTTCTTGCCA | TATGTCTGCA | TAATTTTATT | AAATCACTGC | 720 |
| TATTGACGTG | CAACCTCGAG |            |            |            |            | 740 |

## (2) INFORMATION FOR SEQ ID NO:582:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| GAATTCGGCT | TTCATGGCCT  | ACAAAGGGGT | AGCAAGGCAT | GTCTTACATG | GTGGCAGCAG | 60  |
| AGAGAGAGAG | CAGGGAAAAC  | TGTCATTAT  | AAAACCATCA | GATCAGTTGG | GTTGTGCAAA | 120 |
| TGGTGGAGAA | GAAAACCTTCA | GGAAGAGTGC | ATAGACTGAG | CAGAGAAGAG | GACCAGCTAC | 180 |
| CTCCGTAGAG | GCAGGGAGAG  | CAGCCAAGCT | GGAGCCTGAG | CAGCATTGCT | GGACATGGAG | 240 |
| AAGGTCTGGA | ATCTTGTCAA  | GGAAGCAAGC | AAAGGGTTTC | TTTCTATTCA | ATGAAGTCCA | 300 |
| CTCCAGGAC  | CCTGGGCAGC  | AACGGGTGCT | GGACTGGGCC | ACCTGGCAGC | GTACATCAA  | 360 |
| CTGGCAGCTA | GAAGTCCTGG  | AGAATGACAA | CTTCCAGGAC | GACCCCATG  | TGGGACTCCC | 420 |
| TCAGCTCAGC | AAGAGACTGC  | CACAGTTCGA | TGATGATGCA | GACACCAGAC | AGTAAAAGAA | 480 |
| GAAAACTCGA | G           |            |            |            |            | 491 |

## (2) INFORMATION FOR SEQ ID NO:583:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 566 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AAACAGTCCA | GAGAGGCATA | AATCAGACCC | AGTTCCTAGC | 60  |
| TGGCTTGTC  | TTATCAAGTA | AATGGAAAAG | GGGCCAGGCC | AAAGCAGGGC | AAGATGACCT | 120 |
| TGGACTTGGG | AGAGACTTGG | ACTCATGCCA | CAATCCTAGG | GTGCCCCTG  | GACCATTGCT | 180 |
| TTTCTGAGTT | TTGTAGTCAT | TCGGTGTCTG | AAGTAAGGTA | GATTGAAGTG | AGGCCTTCGG | 240 |
| TTTCCATCTG | GACCCCTTCT | CTCCTGTTTT | CTTTTTTTC  | GCCTTGCTCT | AGGGATGTTT | 300 |
| AATAGCCCG  | AAATGCAAGC | CCTCCTCCAG | CAGATCTCTG | AGAACCCCCA | GCTGATGCAG | 360 |
| AATGTGATCT | CAGCACCTTA | CATGCGCAGC | ATGATGCAGA | CGCTTGCCCA | GAACCCCGAC | 420 |
| TTTGCTGCTC | AGATGATGGT | GAATGTGCCG | CTCTTCGCGG | GGAAACCCCA | ACTGCAGGAG | 480 |
| CAGATCCGCC | TGCAGCTCCC | AGTCTTCCTG | CAGCAGATGC | AGAACCCAGA | GTCACTCTCC | 540 |
| ATCCTTACCA | ATCCCATAC  | CTCGAG     |            |            |            | 566 |

## (2) INFORMATION FOR SEQ ID NO:584:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 482 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

|             |            |            |            |            |            |     |
|-------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC  | TTCATGGCCT | AGTTGAAAAT | GATCATTACA | CAATATATTC | CTAAACATAA | 60  |
| ACTGAGTAAA  | CTTGAACAG  | CTCACTGTGT | GGAGAGGACC | ATTCCCGTTT | TGCTCACCAG | 120 |
| AACTGGAGAT  | TCTTCTGCCC | GCCTCCGCGT | CACAGCTGCA | AATTTTATTC | AGGAAATGGC | 180 |
| CTTGTTTAAA  | GAAGTTAAGT | CTCTCCAAAT | TATTCCATCC | TACCTGGTGC | AGCCATTGAA | 240 |
| AGCAAACCTCT | TCAGTTCACC | TGGCAATGAG | TCAGATGGGC | CTCCTGGCCC | GGCTGCTGAA | 300 |
| AGACCTGGGC  | ACTGGCAGCT | CGGCCTTCAC | CATTGACAAC | GTGATGAAGT | TTTCAGTGAG | 360 |
| TGCCCTGGAG  | CATAGAGTGT | ATGAGGTCCG | CGAGACGGCG | GTTTCAATTA | TTTTGGACAT | 420 |
| GTACAGACAG  | CACCAGGCTT | CCATCCTGGA | GTACCTTCCT | CCAGACGACA | GCTAATCTCG | 480 |
| AG          |            |            |            |            |            | 482 |

## (2) INFORMATION FOR SEQ ID NO:585:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

```
GAATTCGGCC AAAGAGGCCT AATAAAGGTG TGGAAACTTC ATTCATTCAT ATCTTCAACA      60
CAAATTGTAG GTAGCCTGTT TTTTAAACA TTTATTCAAC AAATATTTAG TCCAAGCCAC      120
TATTACTTAC TACCTTCTCT ACTATTGTAT GGACTTTTAA CTATCTCTGA CACTATTTCAC      180
TATTCTTCCA CATCTCTAT TATTATACC TATGGTAAAA TTGCCAGTT TGACCATACA      240
ACTAATACTC ACAGGGACAC TCGAG                                         265
```

(2) INFORMATION FOR SEQ ID NO:586:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

```
GAATTCGGCC AAAGAGGCCT ACTCGAGTTT GGTGCTTTAT TTAGCAAGTG AGTAAAAATA      60
TTGGAATATT TAAGTATTG CATAAAAAAT CAAATGGTAG TGTTTGTAA TCTCTACTGT      120
```

(2) INFORMATION FOR SEQ ID NO:587:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 503 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

```
GAATTCGGCC AAAGAGGCCT ACTCGAGTCA GGTCTAGAAT TCAATCGACG GTTTAGGAAA      60
AAGACAATTT AAGAGAAGAA CTAAAGAAAA GAACAGAAAC TGAGAAGCAG CATATGAACA      120
CAATTAAACA GTTAGAATCA AGAATAGAAG AACTTAATAA AGAAGTTAA GCTTCCAGAG      180
ATCAACTAAT AGCTCAAGAC GTTACAGCTA AAAATGCAGT TCAGCAGTTA CACAAAGAGA      240
TGGCCCAACG GATGGAACAG GCCAACAAGA AATGTGAAGA GGCACGCCAA GAAAAAGAAG      300
CAATGGTAAT GAAATATGTA AGAGGTGAGA AGGAATCTTT AGATCTTCGA AAGGAAAAAG      360
AGACACTTGA GAAAAAATT AGAGATGCAA ATAAGGAAGT TGAGAAAAAC ACTAACAAAA      420
TTAAGCAGCT TTCTCAGGAG AAAGGACGGT TGCACCAGCT GTATGAAACT AAGGAAGGCG      480
AAACGACTAG ACTCACTCTC GAG                                         503
```

(2) INFORMATION FOR SEQ ID NO:588:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 567 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

```

GCCACTATGG TACCAAAACC TCAGTCTTCA CATAGTCAAA CTTGGACACA AACAGCACCT    60
CCCACAAACA TTCTTATCCT CATCCCAGCA TTGGTTACTG ACCACACACT CTAGCAGGTC    120
ACTCAAGCGC TAATGCTGGG AAGGACCTCT GAATACTTCT CTTTGTCTTG TGCCACACAG    180
CCAGGGTCAC CAAAGCCTGT TAATGCTACC TCCAAAAAAG GCAAATCTGA CCCCTCTTCC    240
TCAAAACCCA GCCACATAGT AAGTCAAGG ATTCAGTCAC AGGTCTGCCT TAGTGCACTA    300
GCCCTATAAC AGTAAACTAT TCACTTCCCC TCCAGTCCCT TGCCCCCTTT CAAGCAATTT    360
CCTGTACTGC CAAGGGAATT ACTTTCTAA AATTAGCTAA GAAACTTTG ATGGTATCTT    420
ACTGTCCCAA AAATAAATTT TAATTCCTTC TTTAGCATGG TATAAAAAGG ACACAACAGA    480
GTTTGGTCTA GTGCCTTTT AAAGACACTA GATTTCTCAT CACCATACCG CATGTACCCT    540
ATACGACTTA TCAATTCCTT ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

```

GAATTCGGCC AAAGAGGCCT AGGCATGGTG AGTTTGTATC TTCTTCCCT TCTTTCTTC    60
CCCTTCTTCT TTCCTTCTTT GATCTTCTTC CCCTTCTTTT CTTCCTTTC CCCTTCTTTT    120
CAATTCTCC CACGTC

```

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

```

GAATTCGGCC AAAGAGGCCT AGAGAGAATG GAAAAGATAA GGAACAGAAA CAAACAAATA    60
CCGATAAAGA AAAAAATAAA AGAGAAAGGG AGCTTCTCTG ACACAGGCTT GGGTGATGGA    120
AAAATGAAAT CTGATTCTTT TGCTCCCAA ACTGATTCTG AGAAGCCTTT TCGGGGCAGT    180
CAGTCTCCA AAAGGTATAA GCTCCGAGAT GACTTTGAGA AGAAGATGGC TGACTTCCAC    240
AAGGAGGAGA TGGATGATCA AGATAAGGAC AAAGCTAAGG GAAGAAAGGA ATCTGAGTTT    300
GATGATGAAC CCAAATTTAT GTCTAAAGTC ATAGGTGCAA ACRAAAACCA GGAGGAGGAG    360
AAGTCAGGCA AATGGGAGGG CCTGGTATAT GCACCTCCAG GAAAGGAAAA ACCGAGGCAG    420

```

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

```

GAATTCGGCC AAAGAGGCCT ACATTGCTTT TCAAATAACT TAAAATAACA CGTTATGTGC      60
CATGTGGCTA CTTTAGTAAT ATTGCCAAGA AGAGCACAGT TTTTACACTA GTGGCATCTC      120
AGTGAAATTA ACCAAAGATG AAGCTTTGGC TTTGCTGGTG AGATCAGAGC CCTCGTGAGC      180
AGGCAGCGCC ACTCCAGGCT TCAGACAGGG CTGCACAGGC GGCAGAGATA CAGGGTCTGA      240
GGGCTGAGAC GCCATGGGGC CGCTGCTGCT TATGTGGTTG GATTGTTTAC AAGCCTCATT      300
ATTAAACTG AAGGCATTTT TTTTCTCTG CTGCCTTCC CAAAGTGGTT AGGTTTGGAA      360
AAGAGATGAT GATGGTAATA TTTATTTGTG CTTTTAAGC CATTCCCCA AATGGGACTA      420
GCATGCTTGT TTTCACTATA CCGTGGCCTG CCTCATGATG GTTTGGAGAT ACTGTCTGTG      480
GATGTGAGGT GGGGACTTCA TTCATTGTCC TATTTCTATC TNCACCTTGT GCCTGGAGAG      540
CTTTCAGGGG AGGTGGAGGA GGAGGGTCTG CCAAGCTACT GCAACATCTG TCACCCACTA      600
NACCCAGACC T                                     611

```

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TGAAACCTGT CCCTCCTAGG      60
AAATTGAATA GCTTGAGTTA CGAAGGAACT GCATGGGACA GACTGAGTTT TGTTCTCTC      120
TTCCCTGGAA GCTGGATGTC CTTTACAGCT TTGCCAGTA TGTCATGTGG CCCCTGAAGT      180
ACATAATCCA GAGTGGACTG CCTTTCAGGG TCCCTCAGCT GTGAAAGTGG AGCATTTCATA      240
TCAAGACTAC ATCTTTCCTG TTCAGCTTTC TTCAGCCTTG GAGGAACCCAC ACACAATGGA      300
TCCAAGACTT CTGTCCCTTG CTAATTATCT ATAAGAAGTA AACCCATTTC ACATAACTTG      360
TGAATATGTT TTCTTCACT GGATTTTGGC AAATAGGTAC CCAGTGCATG GTGGACCTAC      420
ACAGTTAGGC CTCTTGGCC GAA                                     443

```

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

```

GAATTCGGCC AAAGAGGCCT AAAAGCATTG AGTATTGGTA AAATGAGTAC AGCTAANCGA      60
ACTTTAAGTN AAAAGGAGCA GGAAGAATTA AAGAAAAAGG AGGATGAAAA GGCAGCTGCT      120
GAGATTTATG AGGAGTTTCT TGCTGCTTTT GAAGGAAGTG ATGGTAATAA AGTGAAAAACA      180
TTTGTGCGAG GGGGTGTTGT TAATGCAGCT AAAGAAGAAC ATGAAACAGA TGA AAAAAGA      240
GGTAAATCT ATAAGCCATC TTCAAGATTT GCAGATCAAA AAAATCCTCC AAATCAGTCT      300
TCCAATGAAA GACCACCATC TCTTCTTGTG ATAGAAACCA AAAAACCTCC ACTTAAAAAA      360
GGAGAGAAAG AAAAGAAAAA AAGCAATTG GAACCTCTCA AAGAAGAATT AAAGCAAATT      420
CAAGAGGAAC GTCGACTCGA G                                     441

```

## (2) INFORMATION FOR SEQ ID NO:594:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

```

GAATTCGGCC AAAGAGGCCT AAGAAAACCT AGCTAATAAA GAAAAAGCTG TTGCTCAAAT      60
GAAGATAATG ATCTCAGAGT GTGAATCATC TGTGAACCAG CTGAAAGAAA CATTGGTTAA      120
TCGAGATCGT GAGATAAACA GCCTCCGGCG CCAGCTTGAT GCAGCTCACA AAGAAGCTCGA      180
TGAAGTAGGA AGATCTAGAG AAATCGCTTT TAAGGAAAAC AGAAGACTGC AAGATGACCT      240
GGCTACAATG GCAAGAGAAA ATCAAGAAAT CTCATTGGAA TTGGAAGCAG CAGTGAAGA      300
AAAAGAAGAA ATGAAGAGCA GAGTTCATAA ATACATAACA GAGGTGTCAC GATGGGAGAG      360
CTTAATGGCT GCCAAGGAAA AAGAAAATCA AGATTTGTTA GATAGATTTC AGATGCTTCA      420
TAACCGTGCT GAAGACTGGG AGGTCAAAGC CCATCAAGCT GAGGGAGAAA GCAGCTCAGT      480
TCGACTGGAA CTTCTTCTA TTGACACTGA GAGGAGACAT CTCGGGAAA GAGTGGAGCT      540
ATTAGAAAAA GAAATCTCG AG                                         562

```

## (2) INFORMATION FOR SEQ ID NO:595:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

```

GGAAGAGCAG AATTTGGTGG CTTATCCTCA TGATGGAAAA ATCTTTTCT GCACCTCACA      60
AGATATCCCT CCTGAAAATG AACTGCTTTT TTATTATAGC CGAGATTATG CTCAACAGAT      120
TGGTGTTCTT GAACACCCAG ATGTGCATCT CTGTAAGTGT GGCAAGGAGT GCAATTCTTA      180
CACAGAGTTC AAAGCCCATC TGACCAGCCA CATCCATAAC CATCTTCTTA CCCAGGGACA      240
TAGCGGCAGC CATGGGCCAA GTCACAGCAA AGAAAGGAAG TGGAAAGTGT CAATGTGCCC      300
CCAAGCTTTT ATCTCTCCTT CCAAACTTCA TGTCCACTTT ATGGGTCACA TGGGTATGAA      360
GCCCCACAAG TGTGATTTCT GTAGCAAGGC TTTTAGTGAT CCCAGCAACC TGCGAACCCA      420
CTCGAG                                         426

```

## (2) INFORMATION FOR SEQ ID NO:596:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

```

GAAAAATCAG TCGACTGAAT GACACCATCA AATCTTTGAA ACAACAGAAG AAACAAGTGG      60
AACATCAGCT GGAAGAAGAA AAGAAAGCAA ACAATGAGAA ACAGAAAGCT GAAAGGGAGC      120
TAGAGGGTCA AATCCAGAGA TTGAACACAG AGAAAAAGAA ACTAAATACG GACCTGTATC      180

```

|  |     |
|--|-----|
| ACATGAAACA TTCTCTCAGA TACTTTGAAG AAGAGTCCAA GGATCTGGCC GGCCGCCTGC  | 240 |
| AACGTTTCATC GCAGCGTATA GGAGAGTTAG AGTGGTCTCT CTGTGCTGTC GCCGCCACAC | 300 |
| AGAAGAAGAA GCCGGATGGG TTCTCGAG                                     | 328 |

## (2) INFORMATION FOR SEQ ID NO:597:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 529 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

|   |     |
|---|-----|
| GAGAAGTCCG AGAGGGGCCA GTGTTGTTGT TACCTGAAAG GTAAGTGCAG CCCACAAAAA | 60  |
| TGCAGTGAAG AAGAAGATAT ATGCATATGT TTAAGTTAAT ACAATTGAGA TACATTTAGC | 120 |
| AGACAGAATC AATAGAGTTG ATGAGTGAAT GACTGGATGT GTGGGGAGTT TATATCACTC | 180 |
| CCAGGTTTTT GACTTGGGCC ACCGGGCACT CAAGAAGGAA AAAGAGGATC CAGGGAGAGG | 240 |
| AACTTTTCTG AGGACTGGGG TAGGGCTGAA CAGCTGCATT CGAGACTGGT GGAGGGTGGG | 300 |
| CTGGGCATGG GATGCACAAA TGGAAATTCC ACTGGGCTCG CAGCTCACAC ATAGGCATGA | 360 |
| CCAGCATAGA GATAGAGAGG CCCCACTGCT GCTGAGTAAC TGTGATTCCC CAGGTGATGG | 420 |
| CATCAGCTGA GAAGGGAAGG AAGCCCATGT GAGGACACTG AAGAAGGAGT GAGCAGACAA | 480 |
| TAAGAAGCCC ACAGAAGACA GAGAAGGAAC AACTAGAAGG AGGCTCGAG             | 529 |

## (2) INFORMATION FOR SEQ ID NO:598:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 454 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

|   |     |
|---|-----|
| GAAAAAGATG AAATCTGATG GATTAGGAGC ATCTGGACAT TCGTCAAGTA CCAATAGAAA | 60  |
| TAGTATAAAT AAAACTCTGA AGCAAGATGA TGTAAGGAA AAAGATGGTA CAAAAATAGC  | 120 |
| ATCTAGATT ACAAAGAAC TTAAACTGG GGGAAAAAT GTTCTGGAA AGCCCAAAAC      | 180 |
| TGTAACAAAA TCCAAACAG AAAATGGTGA TAAGGCACGG TTGGAAAACA TGTCACCTAG  | 240 |
| ACAAGTTGTA GAAAGATCAG CAACAGCAGC AGCAGCAGCA ACTGGACAGA AGAATTTACT | 300 |
| AAATGGAAAA GGAGTGAGAA ATCAGGAAGG GCAAATTCA GGTGCCAGAC CCAAGGTACT  | 360 |
| CACAGGAAAC TTAAATGTGC AAGCCAAAGC AAAGCCTTGA AAGAAAGCTA CAGGGAAGGA | 420 |
| TTACCATGC CTCAGCATCG CAGAACCCTT CGAG                              | 454 |

## (2) INFORMATION FOR SEQ ID NO:599:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 411 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

```

GAATTCGGCC TTCATGGCCT AGGTCCTCAA GCATTGCTTC AATATCAATA TCGTCTGCCA      60
TTTTCTCTAA ACGCCTGTTC CGGCCTTCGG GCGCCTGTGG TGCTCGTGT TCGGGAAGAGA      120
TTGCTGCTGC TGCTGCTGCT GCTGCCGCCG CCGCCGCTTC TGTTCCTACT GTTAAGCCCC      180
TAGGCCCAGG CCGCGGAACC GCCAGCCCCG AATATCGGGT TCCAAGGACG GCTAGGCCCG      240
AGAGAATCTA AAAAAACAA TGGAAATTAGA GAAGCCACG CGGGAGAGCA GGACGGCGGC      300
TTCGGCAGCT CAGGATCCAC CCCNGCGACA GCGTCGACAA GTTCCCTGAA ATGGCGGCCG      360
CTGCTTCCT GTACTCANAN TCCACCCCC GAATTCTAGA CCTGCCTCGA G      411

```

## (2) INFORMATION FOR SEQ ID NO:600:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

```

GAATTCGGCC TTCATGGCCT AATTAAGCCT GCCTACTTCT ACAATGCATT CTGTTACCTA      60
TTTGAACAGT ATGTTTGTA CTATGGCAAT GAAGTCAGTA GATAGGAAAC CAGTTATTC      120
TTCTACCTT AAAAAATTTG AGAACTTGCC AACCAGGGAC TAAAGCTATT ATCTTGACA      180
GAGTCCCTAA AGCTAGTCTA GTTTTGGCCA CATCTGCAAT GATTATTGTT TAAATTCAA      240
AGAATCCTCA GGCTCTACAA TCTAGGGGTG GTAAATGTGT TTCCACTATA CTTGGGACCG      300
CTCGAG      306

```

## (2) INFORMATION FOR SEQ ID NO:601:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 443 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

```

GAATTCGGCC TTCATGGCCT AGGAATCTCC TCTTAAACCA GGTGAAGTGG GAAAGCAGGG      60
ACCATACCAC CCTGAGTGAC ATCTACCTGA ATAATATCAT TCCTCGATTT GTACAAGTCA      120
CGGAGGACTC AGGAAGACTC TTAAAAAGA GTAAAGAAGT CCGCCAGCAG CTCCAAGATG      180
ATTTGATGAA GGTCCTGAAC GAGCTCTACT CGGTCATGAA GACATATCAC ATGTACAATG      240
CCGACAGCAT CAGTGCTCAG AGCAACTAA AGGAGGCGGA GAAGCAGGAG GAGAAGCAAA      300
TTGGTAAATC GGTAAGCAG GAGGACCGGC AGACCCCATG CTCCCCTGAC TCCACGGCCA      360
ACGTTCCGAT TGAGGAGAAA CATGTCCGGA GGAGCTCAGT GAAGAAGATT GAGAAGATGA      420
AGGAGAAGCA CCAAGCCCTC GAG      443

```

## (2) INFORMATION FOR SEQ ID NO:602:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 585 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

```

GAATTCGGCT TCATGGCCTA CAACATGTCA GTTTTTTTT TCATTTTCTT CAATATTTT 60
CTTCTNGCTT TCTCTTCTCC TGGTCCCGAG CCTCTACTCA ATAGTCCCCC CAGCTTTGTG 120
TGCTGGTCTC GGGGCTTCAT GGAGATGAAT GGGCGGGGGG AGTTGGTGGA GTCACCAAG 180
AGATTCTGTG CTTCCACGAG GCTTCCCCC ACTCCTCTGC TGCTATTCCC TGAGGAAGAG 240
GCCACCAATG GCCGGGAGGG GCTCCTGCGC TTCAGTTCCT GGCCATTTC TATCCAAGAT 300
GTGGTACAAC CTCTTACCCT GCAAGTTCAG AGACCCCTGG TCTCTGTGAC GGTGTCAGAT 360
GCCTCCTGGG TCTCAGAAGT GCTGTGGTCA CTTTTCGTCC CTTTCACGGT GTATCAAGTA 420
AGGTGGCTTC GTCTGTTC ACGCCAACTA GGGGAAGCGA ATGAGGAGTT TGCACCTCCG 480
GTACAACAGC TGGTGGCCAA GGAATTGGGC CAGACAGGGA CACGGCTCAC TCCAGCTGAC 540
AAAGCAGAGC ACATGAAGCG ACAAGACAC CCCACACATC TCGAG 585

```

## (2) INFORMATION FOR SEQ ID NO:603:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

```

GAATTCGGCC TTCATGGCCT AGTCTGGTAG TAAGGTGGAG TGGGTTTGGG GCTAGGTTTA 60
GCTCGGGGGA GGTGGTGTG GGGGCCGAG GCTGCGCGGT GCCTGGGTAC ATCTCCAGGC 120
CCACGCCCCG GGCTTGGGAA GTCACATCCA TGTCTCTGCG CCGTGCAGCT TTCAAGATT 180
GCCGAAAGGC TCCCAGAGCT CTGTTTTAAA TGGTGAATCC ATCTTTAGAA AGAAGCGTGA 240
TTCTCCTTGA AGTGAGCCTG GCATTTGTCA GACAGGAAAC TCCCAGGAG GAGCACCTGT 300
GGTGGTTTGG GTTGGGTTT TTAAGTGCAG AGAGTGGGAA GAACAGATGC TCCTCACACC 360
GTCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:604:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 604 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

```

GAATTCGGCC TTCATGGCCT AGGAAAGACC ATCAGCCTGG GAGTCAGTGA ACCTGACTCT 60
GATCCCAGCT CTGCCTCCAN TCAGCTGTGT GATGACAGGT AGGTCAACCT CCCTCTCTGA 120
GCCACAGTTT ATCTGTCTGT AAACAGGGGT ATTGGACTGG ATTCTCTGTT ATCTCTCATG 180
TCTCTGTGAA AGGTCTGTGT TTTCAAATAC TCCTTAGGGA CATGACCTCA CATAGAAAGA 240
GGGGGTGCCA CGAACTGGAT TCCCAGCACT CCCCCTTCCC AGCTCTGCTC AAGCTGAGGG 300
ACCTTGAAC ATGGTACTTG GACCTAAGTA CTCTCTCTGG GCTTCAGTGT CCCCAGCTAT 360
AAAATGGGGG AAATGCCTAA CTCAGGAGGT TGAGGTAAGG ACAAAGGAA TTAATACATG 420
GAAAGTGCCT GGAACAGTGC CTGGCACAGT CTGCTTTTCA AAAAAAGTGC AAGGTGGCTA 480
CTCTCAGCAG ATATAAGTTA ATGCAGGAAC AGCAACTAGC AGCTCTTGGA CATGCAATAT 540
ATTATATATT TTTTGCATCT TTTACCTTC ACGGCACTGA GCCTCACAAT CCGTTGACCT 600
CGAG

```

## (2) INFORMATION FOR SEQ ID NO:605:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

```
GCGCAGCCAG CGCCTGCCTC CGACTCGACT CCACACCTGC TTGCTACAGC GGGTGAGGAA      60
GCAGGAAAGG GGGAGGGAGG GATGTCGTCT GGATTCCTGT AATAATTTGT TTCATTGTTT      120
CCAATCGACT TAGTCACCAG GTTAAATAGT AGCATAGACC TTTCAAAAAA GTAGCTAGCT      180
TATAAGTAGA TGTATTGAAA ACACCTGCTT GTTGAGTCGT AGACAATTCC TCATTACTG      240
TGTGAATCTT AGGGGGTGAA ACACGGGCGG AGAGCGGCTG TGAGCTCAGC CGGCTCCATC      300
CCACAGCGG CCCAGGGTCA CTCGGGGCCA TTAATCAGGC CGCAGAGCTG CCCTCTGAGC      360
CGGGCCGCCA GCGCCACAG GCGCCAGACC AGGGCTCCCT GGGCGGGATG TTTTAAATCG      420
CACAGGGACA AAGGAAAGGA AAGACGCTGG GGCCCAAGCC CGAGCTTATG AACCGTTATC      480
AAGGAGCGAC TCGAG                                     495
```

(2) INFORMATION FOR SEQ ID NO:606:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 331 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

```
GAATTCGGCT TCATGGCCTA GACTTCCAAG GACATGCTTC GAACTCTGGC CCAAGCCAAG      60
AAGGAAATGCT GGGATCGGTT CCTCCAGGAG AAGTTAGCTT CAGAGTTCTT TGTGGATGGA      120
CTTGATTCTG ATGAGAGGTG ACTACAATTG CAAAGTAGAA TTTGCTTTGA CACCTGATGC      180
CAGGACAATA GTATGTTACC ATCCTTCTAT AGACATTCCA TATGAACGCA CAAAACCTAT      240
CCCTTGACCA GATCCTGTGT ATAATAATGA AGAAACACAT GGTCAAGTGC TGAAACTAG      300
AGAAGAAAAA AGTGAACACC TGGAGCTCGA G                                     331
```

(2) INFORMATION FOR SEQ ID NO:607:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 632 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

```
GAATTCGGCC TTCATGGCCT ACTGCCTCGG CCTCCCGAGT AGCTGGGACC ACAGACGCCC      60
ACCACCATGC CCGGCTAAAT TTTTGTATTT TTAGTAGAGA CGGGTTTCAC CGTGTAGGCC      120
AGGATGGTCT CGTTCTCCCG ACCTCGTGAT CCGCCCGCCT CGGCCCTCCA AAGTGCTGGG      180
ATTACAGGCG TGAGCCAACT CGCCCGGCCA GGAATCCCTC CTCTGTCTGA CCTAACTGCC      240
CTCTGCCCTG GAGCTGCTCA GCCTCTATCA ATTTTCTTGG CTCTCAGCGA ACGTTTTTCAT      300
TCAGTTGCAA GACACAGAAA CTCAAATTCA AACCTGCTTA CACAAAATAG TGAATGTACT      360
GGCTCATGCA CTTTTTAAAG AGATGAGTGC TGTGTGCTG CCCAGGCTGG ATGTGAACTC      420
CCGGGCCCAA GAAATTCTCC TGCCTCAGTC TCCTGAGTAG CTGGGACCAC AGGAGCATGA      480
CTGTAAGTCC TGGTGTGAAT CAGGCTCCAG AAACAGCTTG ATCCTGGTTC CCAACAGTAT      540
GGTCAAACT CATCTCTCT TCTGTCTCT TCTCTATGAC AGGTGCTCCC TAAGAAGTGA      600
CAAAGAAGGC CACTAACAGC TCTGGGCTCG AG                                     632
```

## (2) INFORMATION FOR SEQ ID NO:608:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

```

GTATNGTGA AAATAAGAAA AAATATTTCT GAAATTCGGG AACTTGAGAA CATAGAAGAA      60
CACCAGTCTG TAGATATTGC AACTTTGGAA GATGAAGCTC AGGAAAAATA AAGCAAAATG      120
AAAATGGTTG AGGAACATAT GGAGCAACAA AAAGAAAATA TGGAGCATCT TAAAAGTCTG      180
AAAATAGAAG CAGAAAATAA GTATGATGCA ATTAAATTCA AAATTAATCA ACTATCGGAG      240
CTAGCAGACC CACTTAAGGA TGAATTAAAC CTTCTGATT CTGAAGTGGG TAACCAAAAA      300
CGAGGGAAAC GACATTATGA AGAAAAACAA AAAGAACACT TGGATACCTT AAATAAAAAG      360
AAACGAGAAC TGGATATGAA AGAGAAGAA CTAGAGGAGA AAATGTCACA AGCAAGACAA      420
ATCTGCCAG AGCGTATAGA AGTAGAAAAA TCTGCATCAA TTTTGGACAA AGAAATTAAT      480
CGATTAAGGC AGAAGATACA GGTAGAACAT GCTAGTCAAG GAGACCTCGA G          531

```

## (2) INFORMATION FOR SEQ ID NO:609:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

```

GTGACTTTGG AACCTTGAGA GTTAGATGAA TAAATCAGAA AAATGGAATT AAATGTATCT      60
ACTTTATTAT TGGTAAATCT GGTIAGGATG TGCAGCCCTA ATCAGGCTTC CTTAATTCCT      120
TCTCCACTGA GTCTGGACCA GCACTCTCCA GTAGAACTTT CTATGATGAC GGAAATCCTC      180
TGTGTCTGCG CTGATCAGTG TGGTAGTTAC TGGCCACATG TGGCTGTTGA GTACTTGAAA      240
TGTGGCCAGT GTGGTGATGG AATTGTGTTT TTAATCTTAT TTAATTTAAA TTAAATAGC      300
CAAATGTGGC TAGTGGCTGT TGTACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:610:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

```

GTGGAGGCTT TCTTGATCAT GGATGGTGAA GATATACCAG ATTTTCAAG TTAAAGGAG      60
GAAACTGCTT ATTGGAAGGA ACTTTCCTTG AAGTATAAGC AAAGCTTCCA GGAAGCTCGG      120
GATGAGCTAG TTGAATTCCT GGAAGGAAGC AGAGAATTAG AAGCAGAGTT GGAGGCACAA      180
TTAGTACAGG CTGAACAAAG AAATAGAGAC TTGCAGGCTG ATAACCAAG ACTGAAATAT      240
GAAGTGGAGG CATTAAAGGA GAAGCTAGAG CATCAATATG CACAGAGCTA TAAGCAGGTC      300
TCAGTGTTAG AAGATGATTT AAGTCAGACT CGGGCCGAAC TCGAG

```

## (2) INFORMATION FOR SEQ ID NO:611:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

```

GAATTCGGCC TTCATGGCCT AAATGACCAN ATCGAGAGGG AGGACTATGA GGACTTTGAG      60
TACATTCGGC GCCAGAAGCA ACCCAGGCCA CCCCCAAGCA GAAGGAGGAG GCCCGAGCGG      120
GTCTGGCCAG AGCCCCCTGA GGAGAAGGCC CCGGCCCCAG CCCCAGGAAGA GAGGATTGAG      180
CCTCCTGTGA ACCTCTGCTG CCCCCTGCTG CCCCTGACTA TGGTGATGGT TACGTGATCC      240
CCAACTACGA TGACATGGAC TATTACTTTG GGCCTCCTCC GCCCCAGAAG CCCGATGCTG      300
AGCGCCAGAC GGACGAAGAG AAGGAGGAGC TGAAGAAACC CAAAAGGAG GACAGCAGCC      360
CCAAGGAGGA GACCGACAAG TGGGCAGTGG AGAAGGGCAA GGACCACAAA GAGCCCCGAA      420
AGGGCGAGGA GTTGGAGGAG GAGTGGACGC CTACGGAGAA AGTCAAGTGT CCCCCATTG      480
GGATGGAGTC ACACCGTATT GAGGACAACC AGATCCGAGC CTCCTCCATG CTGCGCCACG      540
GCCTGGGGGC ACAGCGCGGC CGGCTCAACA TGCAGACCGG TGCCACTGAG GACGACTACT      600
ATGATGGTGC GTGGTGTGCC GAGGTCATC GAG                                     633

```

## (2) INFORMATION FOR SEQ ID NO:612:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

```

AAATACTAGA GATAAAGTAG ATTTCATGGCT TGGTAAGGAA ATTTTAAGCA TTCCTTCAAA      60
GATTGACGTG CTAAAATAAG CATTGATGTT TTGAGTTTTT TTACACCTAG GATTTTATAG      120
TTGGGTGTGT AGGTGAAGGC CAAGACTCTC TGCAGGAAAA AGCTTATTTT CAAACTCAGA      180
AAATAAAATG TCAATCATAA AAATCTACTT CAACTTTAGC AAAAAGAAAA AAAAAATCAA      240
CAAAAAGTAT ACTCTGTATG CTGGGATTCC GAGGTTCCAA CAACTGTGA CTCGAG          296

```

## (2) INFORMATION FOR SEQ ID NO:613:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

```

GATCCAGTGC TGCAGCTTCC TTACTATGAA ATGACAGCTC CACTTCCTAA TAGTGCATCC      60
GTGTCTTCCT CACTGAATCA TGTTCAGAT CTTGAGGCTG GACCCAGCTC ATATAAATGG      120
ACTCACCAAC AACCAAGTGA CTCTGACCTT TATCAGATGA CAGCTCCACT TCCTAATAGT      180
GCATCCGTGT CTTCTCACT GAATCATGTT CCAGATCTTG AGGCTGGACC CAGCTCATAT      240
ATAATGGACT CGCCAACAAC CCCTCGAG                                     268

```

## (2) INFORMATION FOR SEQ ID NO:614:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

```

GGTGGAACT ATCCAAGAGG CCTTCTGAAT TCCTCTGACA TATATTTGAG AAACGGGGCT    60
ACTGAAAGCC CTAACCCAC  TTGGCTGCAT TTTATTTGGT AACCAGTGAG GCAAACACCC    120
TTGCCAGACC CCTACCATCC ATCTTGATGT GGTTCCTGCA CTGGACACTG CTTGGGTACG    180
GGCCTGCCCA GATCTGGGA  ATGTGGGCG TGGCTCCTCT GAAGCACCAG TGGGCAGAGG    240
ATGAGTCATG GTATCCTCCC GGCACCCTCG AG                                272

```

## (2) INFORMATION FOR SEQ ID NO:615:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```

GAATTCGGCC TTCATGGCCT AGTATTTTTG TAGAGACGGG GCTTCAGCAT ATTGGCCAGG    60
CTGGTCATGA ACTCCTGACC TCAGGTGATC CTCCTGCCTC AGCCTCCCAA AGTGCTGGGA    120
TTACAGGCAT GAACCACTGC ACCCAGTCAA GGGTATAAAA TTTCTACACA GCACAGGCAG    180
ATTCTGGCTG TGGAAAGACC CAAGATTCTT TGAATTGTG ATGCTTTATT TAATTTAGAG    240
ATTATCTTCT CTGTCCCACT CTTCCCTTCT CTAAAAAGGA CTAGATGCTT GCTGCTTAAT    300
TAGTAAAGCA AATTTAAGAT AATTTTCTGC TTTGAGATTT AGGGATAGAT TTTTAAACAT    360
AGTCTTGCTG ATAATGATAG ACATCCTGGG ATGTTGGAAA TTAGGAAACT TGAACCTTTA    420
TTTGCACAGA CTGAGAATTA TGAAGTGGGA AAAGTTAGAG GATCAGAAAA AATAAATTTA    480
TAAATCACAA GCTAGGCTTG GCAATATGAG TGGCGCTCGA G                                521

```

## (2) INFORMATION FOR SEQ ID NO:616:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 577 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```

GAATTCGGCC TTCATGGCCT AGATTGGAAG GTGTGGTAGG CAGAATTCCT GCCCCCATGA    60
CTGCCCCCTC CCCTCACACC CCCCAGGTTG CTCCAATGGT TATGTCACGT TGCTTGGCAA    120
AAGGGACTTT GTAGATGTCA TAAAAGGTGA CTAATCAGCT GACTTGAGAG AGTTTATCCT    180
GGATTATCCA AGGGGCCAGG TGTAATTCCA AGAGCCCTCA AGAGCAGAGC TGGAGAGATG    240
CCGCGCAGGA GGCCTGGGTG CCGTTTCGGA GCAGGATGGA AGGCGGTGAA TCCCGCCTCC    300
AGCATGGAGC TCGGGAGAGG CCCTGACTGC AGATGGAGAG GCTGCCCTGG CCGCAGCGCA    360
CGGGGCTCCT GACCCACAAA AATCGCGAGA TAATGAGTTC ATGTTGTTTG AAAGTCCGTC    420

```

ATTTCTGGTA ATTTGCTATA TAAACTATT GCTATACGAT TAAAACTAA TACAGAAGAA 480  
 TATTTCTTTA ACATTATGTT AAAAAGGAAA AAAGCTAACA TTTTCTTTAT AGCAAAACAC 540  
 TGCCATGATT TACATTAAAA TTAGGAACAT ACTCGAG 577

## (2) INFORMATION FOR SEQ ID NO:617:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 269 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

GAATTCGGCC TTCATGGCCT AGCACATACA GTATAAAAAA TAATCACCCA CCATAATTAT 60  
 ACCAAATTCC TCTTATCAAC TGCATACTAA GTGTTTTCAA TACAATTTT TCCGTATAAA 120  
 AATACTGGGA AAAATTGATA AATAACAGGT AAGAGAAAGA TATTTCTAGG CAATTACTAG 180  
 GATCATTTGG AAAAAGTGAG TACTGTGGAT ATTTAAATA TCACAGTAAC AAGATCATGC 240  
 TTGTTCTTAC AGTATTGCGG GCCCTCGAG 269

## (2) INFORMATION FOR SEQ ID NO:618:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 469 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCGGCC TTCATGGATT CTGCTTTGAA TATAGCTACA GAAATAAAGG ATGGACTACA 60  
 ATGTGGGACA GTGTCTTCTC AGAAACAACC AGCCTTGAAG GCTACAACCTG ACGAGGAAGA 120  
 TTCTGTTTCG AATATAGCCA CAGAAATAAA GGATGGAGAA AAATCTGGGA CAGTGTCTTC 180  
 TCAGAAACAA CCAGCCTTGA AGGCTACAAC TGACGAGGAA GATTCTGTTT TGAATATAGC 240  
 CACAGAAATA AAGGATGGAG AAAAATCTGA GACAGTGTCT TCTCAGAAAC AACCAGCCTT 300  
 GAAGGCTACA ACTGACGAGG AAGATTCTGT TTCGATTATA GCCACAGAAA TAAAGGACGG 360  
 AGAAAAATCT GGGACAGTGT CTTCTCGGAA AAAACCAGCC TTGAAGGCTA CAAGTGATGA 420  
 GAAAGATTCT TTTTCGAATA TAACCAGAGA AAAAAGGAT GGAATCGAG 469

## (2) INFORMATION FOR SEQ ID NO:619:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 448 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCGGCC TTCATGGCCT AGTCCGTGTT GTGGTCAGTG TGTGAACCTC AACTGGACA 60  
 GTAGCTGAGT TTGGGCAGGG ATGAGGAGTG GAGGGGTGAG GTCTAAGGTT CAGAAAAAGT 120  
 TTGTGTTTAA GAACCTGGTT AACTGGAGT CAGTTGCAGA CCAGAATGGA GAAAAGCACT 180  
 CCTGACTTGA GTTGGGTGTG CTTGGGACTG GATCACCTTT GACCTTCTTT ATTTACCTAA 240

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| TTGGAGGGAA | GAGCAGGGGA | GGCAACACTA | TTTCTCTTGG | GTGTTAGAAG | AAGATTCCGAG | 300 |
| CTTATTTGGG | CACTGGTCTC | TATCTTTGCC | TTCAGCTGAA | TCAACATCTA | AGATGTTTTA  | 360 |
| GATGCTTAGC | TAATTCCTCT | TAAAAAAGA  | ATAAGCAGAG | GCCGGACGTG | GTGGCTCATA  | 420 |
| GCTGTAATCC | CAGCAGTGTG | GTCTCGAG   |            |            |             | 448 |

## (2) INFORMATION FOR SEQ ID NO:620:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

|             |            |            |            |            |            |     |
|-------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGNC  | TTCATGGCCT | ACTTAAATCC | ATCAAGTTAC | ACAATCGATC | TGTTGTCAGC | 60  |
| TGAACAGAAC  | CACATTAAAT | TTAAGCCAAA | CACACCAATA | GGAATGTTGG | AGGTAGAGAA | 120 |
| GGTAATTTTA  | AAGCCAAAAA | TGTTGGATAA | GAAAAAACCT | ACACCTATAA | TACCAGAGAA | 180 |
| AACGTGTGAGA | GTAAGTATTA | ATTTTAAGAA | AACACAGAAG | ACCATAGTGA | GAGTGAGTCC | 240 |
| ACATGCATCG  | CTTCAAGAGC | TTGCCCTTAT | TATATGTAGC | AAATGTGAGT | TTGATCCGTT | 300 |
| GCATACACTA  | TTGTTGAAAG | ATTATCAATC | GCAGGAGCCT | CTTGACTTGA | CAAAATCTCT | 360 |
| TAATGACCTG  | GGACTAAGAG | AATTATATGC | GATGGATGTC | AACAGAGAGT | CCTGCCAAAT | 420 |
| ATCACAAAC   | CTAGATATTA | TGAAGGAGGC | CCTCGAG    |            |            | 457 |

## (2) INFORMATION FOR SEQ ID NO:621:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACTCTCTGAT | TTACAGATTG | CTAATTAAAT | GGCTATTATT | 60  |
| AGTTTGGATT | AATTAGACTT | AAGAAAACAA | CTAACTGAGG | GTTTTTTTTT | TTTGTTTTTT | 120 |
| GAGGGTTTTC | TTTGCATGAG | AATTGTATGT | AACCACTGAT | ATGATTATTC | CTGAATGTAC | 180 |
| AGACAGAAGT | AAGCCTGGAC | ATTGTTAAAT | AGTCCCTGCT | TTAAGGGACT | ACGATAATGT | 240 |
| GTACTATGAC | AAACGTGCTT | TATTCTTCTA | ACGCAGTAAG | TCTCGAG    |            | 287 |

## (2) INFORMATION FOR SEQ ID NO:622:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGTAGGTGTA | TCACAGATTT | CTAATGTAGA | ATGGTCAGTC | 60  |
| CAGGAGTAAT | TGTAATTGTG | GAAAAATGGA | GAATTATAAA | ACAAGAATGA | TGTGCAAAAA | 120 |
| AGGACACAGT | TGAATTCATC | TGTGTTCCCT | TAAACTATTT | CATTACTCA  | TTCATCCAAG | 180 |

```

TTTTGAAAAA TGTTGGGAGT CTGAAAAATT CCAGGCACTC TGGATAAATG AGTATGGAAG      240
AATCCTCCAA AAGAACTTTT AGTCTACAGG GGAACATTAA TAAGCAATCA GGGACTTGAG      300
ACCTACAGTG CTGTGGAAGA TTCTCGAG                                         328

```

## (2) INFORMATION FOR SEQ ID NO:623:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 375 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

```

GAATTCGGCC TTCATGGCCT AGGACGTTTG GGTGTTTCC ATCTCAAATA AATAAATAAA      60
TAAAAGTCTA TAAAAACAGC TGGGCCCAGG CATTAAAAAA AATGTTCCGGT CTTCTAGTTT      120
AGTCTTTTAT TGTCTATGCA AATTCTTTGG CTATTGAACT ATCCAAGCTT TCTCTTTTAA      180
AGCTTTTGGG GAATAGGTG CAATACATTT CTTGTCTACT GTTCTCTTA GTGTTTTCTA      240
ATTCTAACCC ACTGTTTTTG GAATTTCTAT TAGATGGTTT TGCAACTTCT GCATCTATCC      300
TCCATGCACC TTCACATTTC CTTACAGTT TTCGTGCTGT TTTCTTGTG TGCTACATTC      360
TGACAGGAC TCGAG                                                         375

```

## (2) INFORMATION FOR SEQ ID NO:624:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 763 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

```

GAATTCGGCC AAAGAGGCCT ACCTCAAAGG ATTGGCTAAA AGCAAGCAAC TGGATTGAAC      60
ACCCTAAGAA GAAAGATTCA CACTGCACCA GGAGACATCA GAAAGAATGA AAACCTGACC      120
GCTGTTTGTG TGCATCTGTG CACTGAGTGC TTGCTTCTCG TTCAGTGAAG GTCGAGAAAG      180
GGATCATGAA CTACGTCACA GAAGGCATCA TCACCAATCA CCCAAATCTC ACTTTGAATT      240
ACCACATTAT CCTGGACTGC TAGCTCACCA GAAGCCGTTT ATTAGAAAGT CCTATAAATG      300
TCTGCACAAA CGCTGTAGGC CTAAGCTTCC ACCTTCACCT AATAACCCCC CCAAATTCCC      360
AAATCCTCAC CAGCCACCTA AACATCCAGA TAAAAATAGC AGTGTGGTCA ACCCTACCTT      420
AGTGGCTACA ACCCAAATTC CATCTGTGAC TTTCCCATCA GCTTCCACCA AAATTACTAC      480
CTTCCAAATG TGACTTTTCT TCCCCAGAAT GCCACCACCA TATCTTCAAG AGAAAATGTT      540
AACACAAGCT CTTCTGTAGC TACATTAGCA CCAGTGAATT CCCAGCTCC ACAAGACANC      600
ACAGGTGCCC CACCCACACC TTGTGACAAC TACACNAGCT CCACCATCTT CCTCAGCTCC      660
ACCAGAGACC ACAGTNGCCC CACCCACACC TTTTGCAACT ACACNAGCTC CACCATCTTC      720
CTCAGCTCCA CCAGAGACCA CAGCTGCCCC ACCCATCTTC GAG                         763

```

## (2) INFORMATION FOR SEQ ID NO:625:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 476 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

10/033,244

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

```
GAATTCGGCC AAAGAGGCCT AGTAGTTTCT ATGTGCGGTC TGGGGTGGGG GCAAGGCCCT    60
TGTGTTCCAC TGGTTTCCAC CACGTTGACA GCAGTCGCTG GCAGCAGAGA GCCATTTCCT    120
GTCATGCTGG TCTGTTCCAG GACTCTGTGG AAGATTCTCT ATCTCCACTG GCACAGGAGC    180
AGAGGAAATG GAAGGACTCA CAGGCAGAGC AGATCTCATC CCCCAAGCCT GTTGGGAGCC    240
ATTACTTTGG GTCGAAACAT TATTGTGAAC ACTAAGTTCT TCAGGTTTTS TAGCATATGC    300
TTTCATTGTG AGAGTTCGTC TAGAATATCG TTTGCTGGGC CTTCTTTCAA AGGATGTTGA    360
TCTTCTTGCT TTATTGGTTT TTGTGGTCTG ATACTCTGTT TTCCCACTAT ATCTAAATCG    420
TGATCCTAGT CGAATAAATC CTGATCGATG AGAAGTCTTT TGGACGGGGC CTCGAG      476
```

## (2) INFORMATION FOR SEQ ID NO:626:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

```
GCGATTGAAT TCTAGACCTG CCTCAACTGT CTGGTTTCCT GTAAAATAAA CACATTGTTT    60
TATATTTTAA GGAACAAAA AGTGCTGCTA TAGGGTTCAA AGTTTTCCTT CTGAACACTT    120
TTCCGAAACA AATTACCCCA AAGACACATT TTGAATATCC TGGTCACATC TTGGATCTG    180
TAAATATAC CTTTGTATAT GGCACCTGTT AAAATGCAAA GCAAAAACCT CGAG      234
```

## (2) INFORMATION FOR SEQ ID NO:627:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

```
GAATTCGGCC TTCATGGCCT AGGCCTTGTC AATCATTGAG CATAAGGAAC TGTCATATAT    60
TTTTTGAGCT GTCAGAAATC CATTAGTGA TTTTCGACAA TTCAAAAAAA TATTTCTGAC    120
CGCTTGATTC AGTTCCTAGT GAATTAGGGA AGAAGAGGAA TAAAAGAAAT ATATCAATCT    180
AAATTATGAA CCCAGAGTCT AGCTTCCTGA ATTCTTCTCT GTGCTTAAAC GAACAACAGG    240
ATGTTGAGGT TCAAAAATAC TCTCTTCTAT TTCCCCCCTT TCCTTCCCTT TTCTTTCCTT    300
CTCTTCCATT CCTCGAAAAG ATAATAAAAC AGAATGTGCC TAGAGCTTCT GGAAAGAATA    360
CAGTCCTGCT GATACTAGAA CTCAGTGAAA TTTGCACCAG ATTTCTGAGC TACAGAACTG    420
AAGATAATTC ATTTATTTCA AGCCACTGAG TTTGTGGTAA ATTTGTTACA GTAGCAATAA    480
AAATCTAATA CATGCCTTCT ATACCAGAAG TACACATCCA CGTGACCATT CCTGTCCTCA    540
CCCCACACAC ACATACACAC ACACACACAC ACGCACACTC GAG      583
```

## (2) INFORMATION FOR SEQ ID NO:628:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACCTGCCTCG | AGTTCCTACT | GCCCCGGGGC | GGCCTGCACA | 60  |
| GAGCTGCTGC | CCTCCAGAGA | CTGTGAATCC | CAAGCCTGAC | TCAGTGGACT | GCTTCCTGTT | 120 |
| CCCCTCCCTC | CTCTTCCTCA | CCTTGTCTG  | CACCCCTAAG | CCTTCTCCA  | ATGCCTCCCA | 180 |
| GGAGGATTTG | GGGACTTTCT | CCCTGGGGCG | CCCAGATCCA | GCTCGGAGGC | CTCACTGGGA | 240 |
| CCTGGCAAGG | CCTGACCTCC | CGCCCAACT  | TGCTTCTGTA | GCCCCCTAC  | TCGAG      | 295 |

(2) INFORMATION FOR SEQ ID NO:629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AACCTGTTGC | TTCCCCTGGG | ACTGAAGGCA | GAAGTGACTC | 60  |
| CCGAAATTCT | CTTCTGGAC  | TCAGAAGGAA | ACCAAAGCAA | TTGATGACAC | CGCATCCCAT | 120 |
| ACTAAAAGCT | ATGGAAGAGA | GAGCAATTCA | ACGAGCTGAA | TGTAGGCGGA | TCTTGGCAGA | 180 |
| GAAGNAGAAA | AAACAAGAAG | AAGANAAATT | GGCCCAGTTA | AAGGCCCAAG | AGGAGGAACG | 240 |
| TCAGAAAAGG | GAGGCAGAAG | AAAAGGAGGC | ACAGCTTGAA | AGAAAACGAG | AAGAGAAGAG | 300 |
| ACTGAAGAAA | ATGAAAGAAC | TTGAGAAGCA | GAAGAGAACT | CGAG       |            | 344 |

(2) INFORMATION FOR SEQ ID NO:630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGTTCTTCCT | TAGGAACAAG | GGCAGGACCT | CAAACAGTCC  | 60  |
| AGAGGAGAAG | CCTGGGGTGG | TCAGGGAAGG | CTTCCTGGCT | GAGAGGACAG | GCTTAGGGGC  | 120 |
| ACCTTGAAAG | TTCAGGCTGA | CTGGGGCTAG | GGGCATGTGG | GTAACAGGTT | AAAGGGGGGG  | 180 |
| GGGCTGGAAA | ATGCAGACAC | CAAAGACCCT | TCAATATGAG | GCCAAGAAAG | GAAGGTTTCAG | 240 |
| AACAGGGATC | ACTCGAG    |            |            |            |             | 257 |

(2) INFORMATION FOR SEQ ID NO:631:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

```

GTTCCAAATC CATGGGAACC AGCACAGGAG CTACAGCAAA TCATGGCACT TCTGCAGTAG      60
CAATTACTAG CCATGATTAC CTAGGACAAG AAACCTTTGAC AGAAATCCAA ACCTCACCAG      120
AAACATCAAT GAGAGAGGTG AAAGCGGACG GAGCTAGCAC CCCCAGTTA AGAGAACAGG      180
ACTGTGGTGA ACCTGCCTCG CCAGCAGCAT CCATCTCCAG ACTCTCTGGG GAACAGGTCG      240
ACGGGAAGGG CCAGGCAGGC AGTGTATCTG AAAGTGCSCG GAGTGAAGGA AGGATTAGTC      300
CAAAGAGTGA TATTACTGAG CTCGAG                                         326

```

## (2) INFORMATION FOR SEQ ID NO:632:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 480 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

```

GAAAAAATGG AAGAATTTGT TTGTAAGGTA TGGGAAGGTC GGTGGCGAGT GATCCCTCAT      60
GATGTACTAC CAGACTGGCT CAAGGATAAT GACTTCCTCT TGCATGGACA CCGGCCTCCT      120
ATGCCTTCTT TCCGGGCGTG TTTTAAGAGC ATTTTCAGAA TACACACAGA AACAGGCAAC      180
ATTTGGACAC ATCTCTTAGG TTGTGTATTC TTCCTGTGCC TGGGGATCTT TTATATGTTT      240
CGCCCAAATA TCTCCTTTGT GGCCCTCTCG CAAGAGAAGG TGGTCTTTGG ATTATTTTTC      300
TTAGGAGCCA TTCTCTGCCT TTCTTTTTC TGGCTCTTCC ACACAGTCTA CTGCCACTCA      360
GAGGGGGTCT CTCGGCTCTT CTCTAAACTG GATTACTCTG GTATTGCTCT TCTGATTATG      420
GGAAGTTTGT TTCCTTGGCT TTATTATTCT TTCTACTGTA ATCCACAACC TATTCTCGAG      480

```

## (2) INFORMATION FOR SEQ ID NO:633:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

```

GAATTCGGCC TTCATGGCCT AGCGGGATCG TATCACTACG CACGTGGCGT CAATGACAAA      60
GACGCCTTCC CCACGGGACA GGCCTTGGGA ACTGCGGGGC AAGGTGTGGG CACGGCGGGT      120
CGCCTTCCAA CCTCCAGGG TCTCCGGTCC TGCCCCCTCT CCAAGACCCA GAGATTCTCT      180
CCATCCGGTG CCTCCGGGAG CCCAGGGTCT GGGGAGTGTG TGGCTATGGC GGGGCGGCTG      240
CTTTTATAGG GAGGGAATCC AGCATTGGG AAACCAGATC TGTCTCCTT CTTCCCTTC      300
CCTCGAG                                         307

```

## (2) INFORMATION FOR SEQ ID NO:634:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 458 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

```

CCTCTGCAAG AAATGCCTAA GCGTATTATC AGGAAGTGA ATTATAAAAT GTTTCAGAT      60
CAAATTAAGC ATCTACAGGT GAATTAATAT AGAATTAAGC TTAGAAAGCT TAAGTAGAAG      120
TTGAATGAAT TGTGTTTATT CTTTGAAACC CATGATTG CAAAACCAAT ATTCCACTGT      180
CTATAGGAGG CAATTGAGAC TGAAAATAAT TTAGAAAAAA AAATAGTCCA GAAAAAAGAA      240
TAGTTCTAGA GATAAATAGG TCATTTGAAG ACTAACCTCT GCCATTAGGG GTTCTAAAG      300
ATAGGCTGAC TCTATCTATT TAATAATTAT TTTGTTTATT AACTCCTTGC ATATAGAATT      360
GTAAGTGATA CCAGCCAGGT ACGGTGGCTC ACGCCTGTAA TCCCAGCACT TTGGGAGGCC      420
AAGCGGGGCA GATCACCTAA GGTCGGGAGT CTCTCGAG      458

```

## (2) INFORMATION FOR SEQ ID NO:635:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

```

GAATTCGGCC TTCATGGCCT ACCCACTCTC ACTTTGTACC TCTGTCAGTT ATCTCCTCTT      60
TACCCCTTCTT TCAACGAGCA TACCACCGGC CCTCCCAGCA CCTATGGCCC AAGCCAGTTG      120
TTTGCAAAT TTATACTGTG ACACAGGACA ATTTACACAC ACATACACAG TTTCACCTGT      180
GACATACTTT TTTTTGAGA TGGAGTCTCA CTTTATTGCC CAGGCTGGAG TGCAGTGGTG      240
TGATCACACC TTATTGCAGC CTCAACTCC TGGGCTCAAG TGGTCTTCTT GCCTCAGCCC      300
CCCTAGTAGC CAGGATTACA GCGGTGCACC ACCATTTCTC GAG      343

```

## (2) INFORMATION FOR SEQ ID NO:636:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

```

GTGGATAACA AACAAACAAA TCTGATGCTC CCTGAGTCAA CTGTTTATGG TGATGTGGAC      60
CTTAGTAACA AAATCAATGA GATGAAAACC TTCAATAGCC CAAATCTGAA GGATGGGCGT      120
TTTGTCAATC CATCAGGGCA GCCTACTCCT TACGCCACCA CTCAGCTCAT CCAGTCAAAC      180
CTCAGCAACA ACATGAACAA TGGCAGCGGG GACTCTGGCG AGAAGCACTG GAAACCACTG      240
GGACAGCAGA AACAGAAGT GGCACCAGTT CAGTACAACA TCGTGGAGCA AAACAAGCTG      300
AACAAAGATT ATCGAGCAAA TGACACAGTT CCTCCAATA TCCATACAA CCAATCATAC      360
GACCAGAACA CAGGAGGATC CTACAACAGC ACAGAGCTCG AG      402

```

## (2) INFORMATION FOR SEQ ID NO:637:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

```

GCTTCCTCGC AGCAAGCGGC TGGAGATAGA GAAGAGCTTA CTGGTGCAGAG CGTCCGTCGA      60
CCCCGTCGCC GCTGACCTAG AGATGGCAGC CGGTCTCACC GACATATTC AGCATGATAC      120
ATACTGTGGT GATGTCTGGA ACACCAACAA ACGCCAGAAT GGCAGACTCA TGTGGCTCTA      180
TCTCAAATAC TGGGAAGTCG TTGTGGAAGT GAAGAAGTTT AAGAGAGTAG AGGAAGCCAT      240
ACTAGAAAAG TAAGACAAGA GTGAAATCAA ACTGCTTTTA GTGACTCGAG      290

```

## (2) INFORMATION FOR SEQ ID NO:638:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 463 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

```

GTCGAGAAAA TGGGGATAAT GGAGAAATTG TGGGCAAGCT GGCTTCCTGG GAAGGGACTA      60
ATTGAACAAG ACAATGATTT ATCTTTTCGG GGTCAGAGG CAGCTTGTTA ATTGGAATTA      120
TTTTCTTAT TTTTGGCCAC AAGTGTTTGG TTGTCCTTTT CTCTGGCTTT TTACCTGATC      180
AGGCTGCAAG CTGCAAGGT GTGGCTTGTG CTGCAGATT GTAAATAAAG ATGACAGGTG      240
AGAGAGACAG TGGTGGAAGT GGTAGAGCTT GCACACCCAC ACGGTGTGGC TGCTCGGGAG      300
GCTGTCTAGT GCACCTGCCA ACAGAGCACA GATATCCTCT CTCCTCATT TCAGATTCTT      360
CCTTCCAGCT GTTTACTAAA CAGCAACAAA AACACCCTCT TGGCTGTAAC TTGTCAAATA      420
AAGTCCCTGC AAAGTGATA AGATTTTCCT CCCCACCTC GAG      463

```

## (2) INFORMATION FOR SEQ ID NO:639:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 513 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

```

GCGAGGGAGA TGGCAGCCTG GGCTTTAGCA GCAGGGAGGA AGGTGAANAA AGAACCGGG      60
CTTGACAGAG AGGTGGGTTC TGCCTTAAAG GCAGAGACCC CCAACAACTG GAATGCCACG      120
GAAGACCAGC ATGAGCCTAC CAAACCTTTG GTTCGCAGGG CTGGAGCTAA TTCTCGCTCC      180
AGGAGAAAGA AGCAGAAGAA GAACTCCAGG CAGGAAGCAG TGCCCTGGAA AAAACCCAAA      240
GGCATCAATT CCAACAGCAC AGCTAACTTG GAGGATCCTG AGGTGGGTGA TGCTGAAAGC      300
ATGGCGATCT CAGAGCCGAT CAAGGGCAGC AGAAAGCCCT GTGTGAATAA GGAGGAGTTG      360
GCTTTGAAGA AGCCCATGGC GAAATGTGCC TGGAAAGGTC CCAGAGAGCC ACCTCAGGAT      420
GCCCAGGAGC AAGCCGAGAG CCCAGGAGGC GCCTCTGAGT CAGACCAAGA TGGTGGCCAT      480
GAAAGCCAC CAAAGAAGAA GCCTGAGCTC GAG      513

```

## (2) INFORMATION FOR SEQ ID NO:640:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 510 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

```

GAATTCGGCC TTCATGGCCT ACACCTCAGC CTCCAGAGCA GCTGGGACTA CAAACGTGTG      60
CCACCATGCC GGGCTAATTT TTGTATTTTC AGCAGAGGTG GGGTTTCACC ATGCTGCTGG      120
CCAGGCTGGT CTCGAACTCC TGGCTTCAAG TAATCTGCCC ACCACAACCT CCCAAAGTGC      180
TGGGATTACA GGTGTGAGCC ACTGCGCCCA ACCAAGAGCT CCTTTTGTGTT TTTCTTTT    240
TGTTGAATTCG GATTCTTTAT ATTCAGGAGT TTTACTTAAA CTTTGAATCT GAAAGAAACT    300
TTAGGAGGAG CTCATAGATT TGTGGGAAGA AGCAAATCTA CATTATTTTC TCTCTTCTAA    360
AATCATATTC CATGTATTTT GATCTTTTAC TGAATTTTAA CACATTGTTT CATCACTAAC    420
ATAAAGTGT TCAATAGTTT TTGTAACCTA CACACAAATA CTGGATTAA AAGTTATATA    480
CCTGAGTATA TTTTATGGC AGGTCTCGAG      510

```

## (2) INFORMATION FOR SEQ ID NO:641:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

```

GAATTCGGCC TTCATGGCCT AGTGTTCCTA GCCAGTCTCT ATTCTCTCAC CTAACACTCT      60
CAAGGAGATA GAAGCTTCAG CTGAAGTCTC ACCCACCACG ATGACCTCCC CCATCTCACC      120
CCACTTCACA GTGACAGAAC GCCAGACCTT CCAGCCCTGG CCTGAGAGGC TCAGCAACAA      180
CGTGAAGAG CTCCTACAAT CCTCCTTGTC CCTGGGAGGC CAGGAGCAAG CGCCAGAGCA      240
CAAGCAGGAG CAAGGAGTGG AGCACAGGCA GGAGCCGACA CAAGAACACA AGCAGGAAGA      300
GGCTCGAG      308

```

## (2) INFORMATION FOR SEQ ID NO:642:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

```

GAATTCGGCC TTCATGGCCT AGTTAGATGA AAATCTAAAG GATGAATACT TTGAGGAAAT      60
CATGGAAGAA TATGAAGATA TTAGACAGGG CCATTATGAG TCTCTCAAGG AGAGGAGATA      120
CTTACCCCTTA AGTCAAGCCA GAAAAAGTGG TTCCAAATG GATTGGCTGT CTGAACCTCA      180
CCCAGTGAAG CCCACGTTTA TTGGGACCCA GGTCTTTGAA GACTATGACC TGCAGAAGCT      240
GGTGGACTAC ATTGACTGGA AGCCTTCTT TGATGTCTGG CAGCTCCGGG GCAACCCAC      300
TCGAG      305

```

## (2) INFORMATION FOR SEQ ID NO:643:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

```

GCGATTGAAT TCTAGACCTG CACCCAGCCA ACACTGAGAG ATTTTAATGA GTACTTTTAT      60
CCACCTGACC ACCATCATTA CCTATCACCT GTCATTCTTC ATCCACCCTA CATCCATCCT      120
TCATCCCCCC ATCATCCACC CATCTATCCT TCATCCATCC ATTCATCATG GAACCATTAT      180
CCATCCCACT ATCATCCAGC CAGCCAGAAA TGACCCATTC ATCTTCATCT CTCATTTCTT      240
CTCTCTAAAC CAGTTCTTAA TCTGGGGCCA AAGTCTTACC CACACATCCC TTAGTCTCGA      300
G                                                                                   301

```

## (2) INFORMATION FOR SEQ ID NO:644:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

```

GAATTCGGCC TTCATGGCCT AGATCCCCCG TGGAGAAAGC AGTGACACAT TCACACAGCT      60
GTTCCCTCGC ATGTTATTTC ATGAACATGA CCTGTTTTCG TGCACTAGAC ACACAGAGTG      120
GAACAGCCGT ATGCTTAAAG TACATGGGCC AGTGGGACTG GAAGTGACCT GTACAAGTGA      180
TGCAAAGGAG GGTTCAAAG AAAAAGGATT TTGTTTAAAA TACTTTAAAA ATGTTATTTC      240
CTGCATCCCT TGGCTGTGAT GCCCTCTCTC CGATTTCCTA GGGGCTCTGG GAGGGACCCCT      300
TCTAAGAAGA TTGGGCAGTT GGGTTTCTGG CTTGAGATGA ATCCAAGCAG CAGAATGAGC      360
CAGGAGTAGC AGGAGATGGG CAAAGAAAAC TGGGGTGCAC GCCTCGAG                      408

```

## (2) INFORMATION FOR SEQ ID NO:645:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```

GAATTCGGCC TTCATGGCCT AGTTATGTGA TTAGGAGTAG GGTTAGGATG ANTGGGAAGA      60
AGAAAGAGAG GAAGTAAAGT TTAATTATGC CTTTTGGGT TTATTATCCC TGATGCATGT      120
GGCCCCCAC TGCTGTGTCC TTCTCCTGTT GGCTAGGTT AGACCACACA GGCTAAACTA      180
ATTCCGATTG GCTAATTTAA AGAGAATGAC GAGGTAAGTG TTTGGCGGG AAAAATGGTT      240
ATGACAGAGC AGGTAATAGG AATGAGTTAG GGTGGAGTAG GTAATCGGAA TGAGTCAGGG      300
TGGAGCAGGT AATTGGAATG AGTCAGGGTA GAGCAGGTAA TCGAAAAAGG TTGCTTTGCT      360
CGAG                                                                                   364

```

## (2) INFORMATION FOR SEQ ID NO:646:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

```

GAATTCGGCC TTCATGGCCT AGGAGTGCAT TTGGATCTAG TGTCTTCTAT CAATCTGTCT    60
GCTGATGTGG CACTACTGCA CCATTTACCA CAACATTAGA ATATGTCTGA GTAACCTGGT    120
GGCTTAGATT TTTTGCAATG AGTCCCACCC CATTTCCTAG AACTTTCATG GCTATTCTTA    180
TATGTTTGTG TTCCGTAAGA TCTTTAGGAT CAATTTGTCT AGTTCTAAAG AGGAAATTCT    240
GATATTATTG ATTTAGTAAC TTTCCATGAA AAAAACCTAC CATCACAGGA AAGATGCACA    300
TTAATTACAG GTAGCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:647:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

```

GAATTCGGCC TTCATGGCCT AGTCAGTGGC TAGATTGATT GATCCTCCAG AATTAGACAC    60
TCACATGTTA ACACCACTCT CAGTTGGAGG GCTGATAGTA AACCTTATTG GTATCTGTGC    120
CTTAGCCAT GCCCATAGCC ATGCCCATGG AGCTTCTCAA GGAAGCTGTC ACTCATCTGA    180
TCACAGCCAT TCACACCATA TGCATGGACA CAGTGACCAT GGGCATGGTC ACAGCCACGG    240
ATCTGCGGGT GGAGGCGAGG TCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:648:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

```

GAATTCGGCT TCATGGCTAC TTTTGGTAA GCATACCCAA CCTTCAGTTA GAATATCTCC    60
TGATAATAAG AAAGATCTCA TTGAAATTTA TTAATCTTT TGTGTCTAGT AGATAACTTG    120
GATGGCACAC AGTGCTTTGA TTTTACCTG CCCAGAATT AACTCCTCAT CCTATCCTAC    180
ATGATTTTCT TTTTCTCTC CCCCTTCCTC TTTTATTCCA TGCTACTGGG AATGGCAGGT    240
CTTGACCAA GTAATGGCAG GTCTTGACC AAGCAAGCCA GAAACCTGAG CTTTAGTCTT    300
TATTCCTCCC CACTTCTCGA G

```

## (2) INFORMATION FOR SEQ ID NO:649:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 559 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

```

GAATTCGGCC TTCATGGCCT AGAGGAAGTG AACGGATGGG GCCTCATCCT CCTGCCTCCC    60
TAAAGGGTGA GGGTGAAGG ATGGGGCTGT GCCCTCTTAG GGCAGGAAA AACAGCTTGG    120
AGGGGTTTCT GCCATCAGAG ATCCCATAGG AGGCAGGTCA GTCCTGCAGA ATTTCTCCCC    180

```

```

AGTCTGGCCT CCAGCCTCCC TGGCCCCTTT CTAGAGGCCT CCATCCCCT GCGGCTTGC 240
TCCTGCCACC GGGCCTCTGC ACAGTCACCT CCTGCAGCCT GGGGTGTGTC GCCTCTCCAC 300
GTCTTGATAT TTTTGCTGGA ATGCAGACGA TACTATATTT ACCGTATAAT ATATTATCAG 360
CTCTCCTATA TCTCAGTCAA TTTACATAGT TTAATAATAGA ACATCTTATT AAAACATCT 420
AGATATACAC AGATTAGGAA ACGCTTACAA CATACAAATA CACAACTAG AAATAAATCT 480
TTAGCATACT GGTATATACA ACAGTGTGAT ACAATAAATA ATTTTCATTCA TGCTCTATCT 540
ACACATCATA TTGCTCGAG 559

```

## (2) INFORMATION FOR SEQ ID NO:650:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

```

GAATTCGGCC TTCATGGCCT AGGGAGACTG AGGCAGGCAG ATCACCTGGG GTCGGGAGTT 60
CGAGACCAGC CTGACCAGCA GGGAGAAACC CCGTCTCTAC TAAGAATAGA AAATTAGGTG 120
TGGCGGTGCA TGCCTGTGGT CCCAGCTACT CGGGAGGCTG AGGTAGGAGA ATCGCTTGAA 180
CCCGGGAGGC GGAAGTTCATG GTGGGCGGGG ATTGCACCAT TGCACTCCAG CCTGGGCAAC 240
AAGAGTGAAA CTCCATCTCA AAAAAATAAA AGCCTAGCCT CCCAAAGTGC CAGGATTACA 300
GGCATGAGCC ACCGCGCCTG TCTGTCCGCC CGTCTTCTTT TTTAAGAGCA AGAAAAGGTT 360
TCCCAGAAGT ACTCTGGTAG ATTCTTATCA CACACACATT CCTAAACCAG TTACTGGCAA 420
AGAAAATAGA ATTATCATGA TTAATTAGCA TATTCTGAAG NACATGCTC CCTCGAG 477

```

## (2) INFORMATION FOR SEQ ID NO:651:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

```

GTGTGAACCT ACGGGAAGGC GGCCGCCTGC ACCTCTGTGC GGAGACCAAG GATGATGCCC 60
TAGCATGGAA GACAGCACTG CTGGAGGCAA ACTCCACCCC GGTGCGCGTC TACAGCCCGT 120
ACCAAGACTA CTACGAGGTG GTGCCCCCA ATGCACACGA GGCCACGTAT GTCCGCAGCT 180
ACTACGGACC GCCCTACGCA GGCCCTGGCG TGACGCACGT GATAGTGCGG GAGGATCCCT 240
GCTACAGCGC CGGCGCCCCT CTGGCCATGG GCATGCTTGC GGGAGCCGCC ACTGGGGCGG 300
CGCTGGGCTC GCTCATGTGG TCGCCCTGCT GGTCTTGAGC CCTGGGAGTC GGAGCACTGA 360
CCCCTGCGCT TGGATTGCTA GACTCCTCTT CCTCCTGGAC CCCATCCTCT CGAG 414

```

## (2) INFORMATION FOR SEQ ID NO:652:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

```

GAAGGAAAAC ATGGGCACAG GGGATTTTAT CTGCATTTC ATGACTGGAG GGGCGCCCTG      60
GGGGTTCAGA TTGCAAGGTG GCAAGGAGCA GAAGCAGCCC TTACAAGTTG CAAAGATTTC      120
AAATCAGAGC AAAGCCTCTG GGTCTGGGCT CTGTGAGGGA GATGAAGTGG TTCCATCAA      180
TGGCAACCCT TGTGCAGATC TCACCTACCC TGAAGTCATC AAGCTCATGG AAAGCATAAC      240
AGACTCTCTC CAAATGCTCA TCAAAGACC ATCCAGTGGG ATAAGTGAGG CTTTGATATC      300
TGAAATGAA AACTCTAACC TCGAG                                     325

```

## (2) INFORMATION FOR SEQ ID NO:653:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 443 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

```

GAATTCGGCC TTCATGGCCT AGGTATTTAG GCTTTTGTCT TAACAGCAAA TCCTGGCTGT      60
CTGGGGCCTG ATGACTGTGT TCCATGGGTA TCCACTCCCT GTCCACAGTG TGGGAGCCCC      120
TCAGCTGCTT ATTGCAGGGA CACAGAGCCC GGCATGGTCC AGAAGGCGGG CTTATGGGGC      180
CTGCAGCACA CAGGGAAGT GAGCCACAC TGTGATAGGA GGGCAGACAC ACAGGATGTG      240
TTCTGTGTTA CAGGGTTGCC GTGAAGAATT TCATTCTTTT GCAGGAGCTG GAGAGAAAAT      300
TTTATGTGGA AGGTAGCCCT TGGAAATGAC CTCAAAGAAT AGGTAGGATC TTAGCCTGCG      360
TTTGAAGCC TGGAAAAAA CAGGATGACA GGATGAAGAG GCCACAGCAC AGCTGCAGAC      420
AATGGGAGTG CGGAGATCTC GAG                                     443

```

## (2) INFORMATION FOR SEQ ID NO:654:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

```

GGGAGCGCCG GTGGTTCATC CTGACCGATA ACTGCCTCTA TTACTTTGAA TACACAACAG      60
ATAAGGAGCC CAGGGGAATC ATCCCGTTGG AAAACCTCAG CATCAGGGAG GTGGAGGACC      120
CCCGGAAACC CAACTGTTTT GAGCTCTACA ATCCCAGCCA CAAAGGGCAG GTCATCAAGG      180
CCTGTAAGAC GGAGGCGGAC GGCNGCGTGG TAGAGGGGAA CCATGTGGTG TACCGGATCT      240
CAGCCCCGAG CCCGAGGAG AAGGAGGAGT GGATGAAATC CATCAAAGCC AGTATCAGCA      300
GATCCCTCGA G                                     311

```

## (2) INFORMATION FOR SEQ ID NO:655:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

```

GGGGGATACG GATACCCAAA CTTCAATGTT CTTGATAGT AGGAAGGAGG ACAGTTATAT      60
AGACCATAAG GTGCCTTGCA CAGATTCACA AGTGCAGGTC AAGTTGGAGG ACCACAAAAT      120
AGTAACTGCC TGCTTGCCTG TGAACATGT TAATCAGCTG ACTACTGAGC CAGCTACAGG      180
GCCCTTTTCT GAAACTCAGT CATCTTTAAG GGATTCTGAG GAGGAAGTAG ATGTGGTGGG      240
AGATAGCAGT GCCTCAAAAG AGCAGTGTA AGAAAACACC AATAACGAAC TGGACACAAG      300
TCTTGAGAGT ATGCCAGCCT CCGGAGAACC TGAACCATCT CTCGAG                      346

```

## (2) INFORMATION FOR SEQ ID NO:656:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 116 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

```

GAATTCGGCC AAAGAGGCCT ACTAAACCGT CGATTGAATT CTCGAGGCAG GTCTAGAATT      60
CAATCGACGG TTAGGCTCC CTATAGTGAG TCGTATTAAT TTCAGAGGTG TATTTA          116

```

## (2) INFORMATION FOR SEQ ID NO:657:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 482 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

```

GAATTCGGCC AAAGAGGCCT AGGGATGAGG GTGAAGAAGG GGAGAGGGTT GGTAGAGAT      60
ACAGTGTGGG TGGTGGGGGT GGTAGGAAAT GCAGGTTGAA GGAATTCTC TGGGGCTTTG      120
GGGAATTTAG TGGTGGGGTG AGCCAAGAAA ATACTAATTA ATAATAGTAA GTTGTTAGTG      180
TTGGTTAAGT TGTGCTNGG AAGTGAGAAG TTGCTTAGAA ACTTTCCAAA GTGCTTAGAA      240
CTTTAAGTGC AACAGACAA ACTAACAAAC AAAAATTGTT TTGCTTTGCT ACAAGGTGGG      300
GAAGACTGAA GAAGTGTAA CTGAAAACAG GTGACACAGA GTCACCAGT TTCCGAGAAC      360
CAAAGGGAGG GGTGTGTGAT GCCATCTCAC AGGCAGGGGA AATGTCTTTA CCAGCTTCGG      420
TGGCTGGCAC GTGTTACCAG GCCGAGTGGG ATGACTATGT GCCCAAAC TG TACGAGCTCG      480
AG                                     482

```

## (2) INFORMATION FOR SEQ ID NO:658:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGTCC CTTCTGTCCC AGTCGTTCTG GCCTCTTGTC      60
CCACGCAACT CCAGCTTGTA CCATGCCGGT CAAAGGAGGT AGCAAGTGCA TCAAATACCT      120
GCTCTTCGGA TTAACTTCA TCTTCTGGCT CGCTGGCATT GCAGTGCTTG CTATTGGACT      180

```

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| ATGGCTCCGA | TTCGACTCTC | AGACCAAGAG | CATCTTCGAG | CAAGAGAATA | ACCATTCAG  | 240 |
| TTTCTACACA | GGAGTGTA   | TTCTGATTGG | AGCCGGGGCC | CTCATGATGC | TGGTTGGTTT | 300 |
| CCTGGGCTGC | TGTGGAGCTG | TACAAGAGTC | CCAGTGCA   | CTGGGATTGT | TCTTCGGGTT | 360 |
| CCTCTTGGTG | ATATTCGCCA | TTGAGATAGC | CGCCGCCGTC | TGGGGCTATA | CCCACAAGAG | 420 |
| TCGAGTCGAG |            |            |            |            |            | 430 |

## (2) INFORMATION FOR SEQ ID NO:659:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAGAGTACAG | AGATTTCACT | TCATCTTG   | CTAATGTTTA | 60  |
| ATTNAAAGTA | TATTGACACT | AGTAAAGACA | CTTTATTTTA | ATTTGAGGTA | TAAATGTCTA | 120 |
| CCTAAAATAG | ACTATTTC   | TTGAGTCATA | CATTTTAAAT | GTGGTATATA | TTCTTATATT | 180 |
| TCAGAAAATG | ATAACTATCA | TAGAAATCTA | ATACTCATT  | ATTTGATTAA | TAATTATTTT | 240 |
| TTTCCTCAA  | TTTGAAATA  | TCTTTTCTA  | TGTAATGGTC | ATGTCCTGAG |            | 290 |

## (2) INFORMATION FOR SEQ ID NO:660:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGTCAGAAGT | CTTTGTGTCC | CTGTTTTTGT | GTCCATTTCA | 60  |
| TGTACCTTGG | CACTTTAAGG | CTTGTCTG   | AAAATAAAAC | ATTGCATCAT | CACCTGTGAA | 120 |
| GGCAGAGCTT | GGGAGTTTGC | ACTGCTAAGA | TGAGGATAGG | AAAGAAATTT | ATGCCGCAGG | 180 |
| GCCTTTGATG | CTGCCCACTC | ACCTGTCTGC | ACAGCCAGGG | CACGGCCAGC | GGGAGTGGAG | 240 |
| AAGACGAGCG | AGACCAAAAC | CTTGCCGTGG | GGAGGAGGCT | GGCATAGCCA | TTGATAAATC | 300 |
| GGGACTTGAA | CTATCCCATC | ACTCTAAAAA | TATTTTTTAT | CTGATTACAA | AAGTAATAGA | 360 |
| TGGCCAGGCA | TGATGGCTCA | TGCCTGTAAT | CCCAACACTC | CTCGAG     |            | 406 |

## (2) INFORMATION FOR SEQ ID NO:661:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGTGGAATG  | AAAACCTCAG | GGAGGCATCA | AACCCAGGCT | 60  |
| TGGGGGACAA | AACTAAGTCT | TGCCAGAGTC | CTGAAGGATG | AACAACAGTT | AACCAAGCAA | 120 |
| GGGATACTGG | AGGGCATGGA | GGCTCTCTGG | CCTGGAGTGC | AGAGCATGGA | GTGCTCAAAG | 180 |

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| AGCTAGTTAG | CTCTGCAAAG | CTGAGTGTCA | GGAATGTAAA | GGGAGAGAAT | AGGAGTGAGA | 240 |
| GAAGAGTCTG | GCAAGGCAGA | CAGGGAAGGC | CTATATGCCT | TGATGGAGAA | CCACTGAAGG | 300 |
| ATTTAAAGAA | GGAGAGGGTT | AATTTTGTCC | AATAGAAAGA | TCACATTGTG | TGTAGTGTGG | 360 |
| AGGATGGGTT | GCAGAGAGAG | AAGCTAGAGA | CCAAAAGATG | AGACGGGAAC | AGCTGCAAAT | 420 |
| TTCGAGAGCT | CGTAAGATTA | TGTATGGCTG | GACCACTCGA | G          |            | 461 |

## (2) INFORMATION FOR SEQ ID NO:662:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGCCTGAGCT | CAGGAGTTCA | AGACCAGCCT | GGGCAACACA | 60  |
| GTGAACTCC  | ATCTCTACTA | AAATACATAA | AAATTAGCTG | GGCCTGGAGG | CATGCACCTG | 120 |
| TGGTCCCAGT | GCTACTGGGG | AGGCTGAGGC | AGGAGAATTG | CTTGGGCCCC | GGAGGCAGAG | 180 |
| GTTGCAGTGA | GCCAAGATCG | CGCCACTGCA | CTCCAGCCTG | GGCAACAGAG | CGAGACTCCA | 240 |
| TCTCAAACAA | ACAAACAAC  | AAACAACAA  | ACAAAACAAC | AGTTATTTTT | TTCTCACCAT | 300 |
| TCTAAAGAA  | GTTACATTG  | ATTCTTTTTC | AAAATTGGT  | CAGTTTTGAT | AGTCTTATTT | 360 |
| CTCCATACTT | TCATTCCCC  | TTTTTATTTT | TGTAATAAT  | TGAACCTTAT | ATTCCTTATA | 420 |
| TGATAATTTT | AATATCCAAA | GTCAATGGTC | ATATTCTCCA | GTTCATGATT | TCTGCTGAGT | 480 |
| TTGTGGTGCT | GATTTTCTCG | AG         |            |            |            | 502 |

## (2) INFORMATION FOR SEQ ID NO:663:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACAACCACCA | ACATTTGTGT | TTTTCAGAT  | GAACAGGTG   | 60  |
| ACAGAAGTCC | CACTGGCTCA | GGAGTGACAG | CCCGAATTGC | CTTACAGTAT | CACAAAGGGC  | 120 |
| TTCTGGAAT  | GAACAGATG  | AGAGCCTTCA | AAAGCAGTGC | AACTGGCTCA | GTATTCACAG  | 180 |
| GGAAAGCTGT | GAGGTAAGT  | GGCACCTTA  | GCTTCTTATT | TATAAATGTG | TCACTCATGA  | 240 |
| GACTGGAGAG | GCCTGAGTTG | GGTGTGAT   | AAATTTCTTC | ACTCAGCTCT | CAGAAGAGAA  | 300 |
| TTTTAAAGCA | GGCCTGTAAA | AACTTCTTTT | CAACTAGGAC | ATTGGTTATC | CAGTGTGGTC  | 360 |
| TTGGGGCCCC | AGCGGGCCCC | TAAGGTCCTT | TCCATGGGTT | CAGAGGGTCA | AACTGTGTGTT | 420 |
| CATAATAATG | ACATTATTG  | CTTTTCACTC | TCATTCTCTC | AAGAGTGATC | AGTGGGTTAC  | 480 |
| TCGAG      |            |            |            |            |             | 485 |

## (2) INFORMATION FOR SEQ ID NO:664:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAAAATTATA | AAGTGTAATA | TATCTTTGTA | TCTCTAGTTT | 60  |
| TTCTCCTTTC | CCCAGATAAG | AATAAAAGCA | GGCTGCAGGC | TCCTGGGGTG | ATAACCCACT | 120 |
| TGGGTCGAGT | TCCATCGCTG | TTGGCGATAA | ATCTTGTGG  | TGTTCACTTT | TTGGGTTCTC | 180 |
| ACTACCTTTA | TGAGCTATAA | CACTCACCT  | GAAGGTCTGC | AGCTTCACTC | CTGAAGCCAG | 240 |
| CGAGAGTACG | AACCCACAGG | CAGGAAGAAA | CTCTGAACAC | ATCCGAACAT | TGGAAAGAAC | 300 |
| AAACTCCAAA | CAAGCCGCTT | TTAAGAACTG | TAACACTCAC | AACTCGAG   |            | 348 |

## (2) INFORMATION FOR SEQ ID NO:665:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

|            |            |             |            |             |            |     |
|------------|------------|-------------|------------|-------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGTCGTTATC  | AGAGGTGGAG | ACATTTAGAA  | GTTGTTCTTA | 60  |
| ATCAGAGTGA | AGCTTGTGCT | TCGGAAAGTC  | AACCTCACTC | CTCAGCACTC  | ACAGCACCTA | 120 |
| GCTCTCCAGG | TTCCTCATGG | ATGAAGAAGG  | ACCAGCCCAC | ATTTACCCCTC | CGACAAGTTG | 180 |
| GCATAATATG | TGAGCGCCTC | TTAAAAGACT  | ATGAAGATAA | AATTCGGGAG  | GAGTATGAGC | 240 |
| AAATCCTCAA | TACCAAACTA | GCAGAACAAAT | ATGAATCTTT | TGTGAAATTC  | ACACATGATC | 300 |
| AGATTATGCG | ACGGTATGGG | ACAAGGCCAA  | CAAGCTATGT | GTCATGAAGC  | TTGTGCACAT | 360 |
| ATCTGGGTAC | CAGGTTTGAC | CTCAAGAGAT  | GGCTGCTGTA | CACTTTTCGC  | AACTGGTTTG | 420 |
| ATGTCACATT | TCAGCTCCAA | CTTTGCATCC  | TGAGAACACT | TAAAGGTTTC  | TGCAGGTCCA | 480 |
| TTTTATACAA | CTTGAAAGAC | CGTAAACTTT  | TCTGGTTGCC | ACAAGCATAT  | CTTCTTTTTC | 540 |
| TGCTCATCCA | ATAAACAGCT | GAGCCCTCGA  | G          |             |            | 571 |

## (2) INFORMATION FOR SEQ ID NO:666:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GGGATCATT  | TTATTCAGCT | ACTGAGAACT | AGAATATTAA | GAGACTGCTG | GCAAGGCAAG | 60  |
| CAGTTAATTT | TCAGTTGAAA | TTGCATTAAA | TAAAAAGTAT | TTTCTTGCTT | TGTGGAAGCA | 120 |
| CGTGAATTTT | TGTAAAAAGC | TGCTTGTTTT | CCCCATTAC  | AGGTTCTGTA | CAGAGTAATG | 180 |
| AGATGTGTGA | CGGCTGCAA  | CCAGGTGTTT | TTTCTGAGG  | CTGTGTTGAC | AGCTGCTAAT | 240 |
| GAGTGTGTG  | GTGTTTTGCT | CGGCAGCTTG | AATCCTAGCA | TGACTATACA | TTGTGACATG | 300 |
| GTCATTACAT | ATGGATTAGA | CCAACTGGAG | AATTGCCAGA | CTTGTGGTAC | CAATTATATC | 360 |
| ATCTCAGTCT | TGAATTTACT | CACGCTGGTA | TGTGAATTAT | TCTTTTCCTT | TTAATGTGT  | 420 |
| TGGTTTATTC | AGGCCCATCT | CGAG       |            |            |            | 444 |

## (2) INFORMATION FOR SEQ ID NO:667:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

```

GGGAACTGAC AAGCAATTAA CTGGAGAATA AGTGAGGGGA ATGGAGCAGT AGTATTCTTT      60
AACTTAATTT GCCATTTAAG AGAGCACTTG GAATCTGAAG AAAGTCTATC CCTACCAAGG      120
AAACGGAGTC AAATTGCAAT TAAGATTAACT TTTGGTTATA TGGAAAGCAAG AATCATGCTT      180
CTCATCATCA ATTGCGTCTC TTTGGTAGCC AATAATTCCA TCTGTAATCA TGGCAGCAAC      240
TTAAGTATTG CCAATGTTTT CAAATGTGTT ACAGCATTAA GGCATCCACA TCTAAAGAGG      300
CAGTTTAA CAAGAGGAAA ACGGAACTGA AATGTGCCAA GAAGTGAACA CGGACATGGC      360
CTCTCCTGGA ATACTGCCCA CCATGCCAGC AAGCTCTTCC TCCAGTCAAG AAGGCCTGTG      420
CCACGCTGCT TGGTTCCTG CTGCCTGAAG ATGCATTGA GCCCTATGAG ATTAGTATGG      480
CTATTTCTGT CTGCTGACCA GGAGAGAAAT GAGTAGTTCT CGAG                          524

```

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

```

GAATTCGGCC AAAGAGGCCT ACACAGAGGG ATAATTGGCA TTGGTATCAA CTGACATATT      60
CACAACTTTG AATAAACTT TCCACATTTG GAAAATCACC ATGCCTGGCC CCTAGGCTAT      120
ACTTTGAAAA CCACTGCTTT AGTGTTTAG AAATTGTTAC CCTCATACTA ATATTACTA      180
CACCCCCCAC CTTGACAATA CATACAAAG AGGAGTAACA GTTCCCATA ACCTTTCTAA      240
ATTTGAGTCT TATTAAACCA GACTCATAGC CCTGTGTGAC TTTTCTTCTT GATCTGTGCC      300
TTATCCCTAG GGCGGTGATC ATGCGGTAT CTGCTAATTG GCAGATGTGA GTGGTTATAC      360
CTATTTACAA GCAACTCATT GCAAAAATAA TTTAGCTAA AGAAAACATC CATGGCCAGA      420
GAATAAGTTT TGGAAATTGA TATGTTAAAT GAGCTTTATG TTTACCTTTA AAAGGTTAAA      480
ATATTTACCA TTCATGGATT ACCTTTTTTC AGAAAGTAAG AATATATAAA TTACATTTAA      540
TCTTGAAGCT CGAG                          554

```

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

```

GAATTCGGCC TTCATGGCCT AATCGTATTC CATCTACTGC ATACTTTTCA TAGATGTCCT      60
CCATCAGAAG CACCTATGGT TGTTTGTTAA ACGTGTTATT TCCTGATCCC ACCCCAGGAT      120
TTCTGAGTAT TCTAAGAATT TCTAAGTGTG AGGCCTGGAA ATATGCATT TACAACCCCC      180
TAGAACATTC TTATGTGCAC TAAAATTGTA GAACCACTAA TCTGGTGTAT ATACTGTTGT      240
TACTTAATAT TTTCTTAATG ATAGATACTT GGATGATTTT TGACTTTATT ATTATTATAA      300
GCAATGTTGT AAACATCACA CAGGCCAAG                          329

```

(2) INFORMATION FOR SEQ ID NO:670:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GCGTATGAT  | ACCTAAAGTG | GAGTGGTCGG | CGTTCCTGGA | GGCGGCCGAT | AACCTGCGTC | 60  |
| TGATCCAGGT | GCCGAAAGGG | CCGTTGAGG  | GATATGAGGA | GAATGAGGAG | TTTCTGAGGA | 120 |
| CCATGCACCA | CCTGCTGCTG | GAGGTGGAAG | TGATAGAGGG | CACCCTGCAG | TGCCCCGAAT | 180 |
| CTGGACGTAT | GTTCCCATC  | AGCCGCGGGA | TCCCCAACAT | GCTGCTGAGT | GAAGAGGAAA | 240 |
| CTGAGAGTTG | ATTGCACCAG | ACTCGAG    |            |            |            | 267 |

## (2) INFORMATION FOR SEQ ID NO:671:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATCGGCC  | TTCATGGCCT | ATTATCTCTC | AAAAACAAAG | CAATAAGTAC | CAAGAAATAG | 60  |
| CAACAAAAAT | TAGCTTGTA  | GGTTGGTTTC | TGAGGGTAGA | AATGGCTCTT | GATGCCATGT | 120 |
| GGAGCAATGG | GAAGGAGGCT | TTCTAGTTAC | ACAGACTCTT | GGTCTGCCA  | CTTATTCATT | 180 |
| TTATTTTATT | TTATATTTTA | CTTTAAATTT | TTTGAGATAG | GGTTTCACCC | TGTCGCCAG  | 240 |
| GCTGGTGGGC | AGTGGCTCAC | TGCAGCCTCG | AACTACCAGG | CTGAAGTGAT | GCTCTTACCT | 300 |
| CAGCCTTTTC | AGTAGTTGGG | ACAACAGGTG | CACACCACCA | TTCTGGCTA  | ATTAAAAAAA | 360 |
| TTTTTTTGTG | GGAACATGGC | AAGACCTTGT | CTCTATTAAC | AACAACAGCA | ACAGCAACAA | 420 |
| CAACTCGAG  |            |            |            |            |            | 429 |

## (2) INFORMATION FOR SEQ ID NO:672:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GTAAATCGT  | TCTTGAGAGG | AACGTCTCTG | TGCGAAGAGA | TAATGAGTTT | AGCTCTGAGA | 60  |
| AGTGAGCTTG | TAGTGGACAA | AACAAAGAGG | AAAAAAGAA  | GAGAACTGTC | TGAGGAACAG | 120 |
| AAACAAGAAA | TTAAAGATGC | TTTTGAACTA | TTTGATACAG | ACAAAGATGA | AGCAATAGAT | 180 |
| TATCATGAAT | TAAAGGTGGC | AATGAGAGCC | TTGGGGTTTG | ATGTAAAAAA | AGCTGATGTA | 240 |
| CTGAAGATTC | TTAAAGATTA | TGACAGAGAA | GCCACAGGGA | AAATCACCTT | TGAAGATTTT | 300 |
| AATGAAGTTG | TGACAGACTG | GATATTGGAA | AGAGATCCCC | ATGAAGAAAT | ACTCGAG    | 357 |

## (2) INFORMATION FOR SEQ ID NO:673:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 292 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

|   |     |
|---|-----|
| GGTAGATACT GGTTTTTCGT ATCCTGCTTC TCTTAAGGGC AGCTCTTTT AGCATACTCC  | 60  |
| CATGCAGCAA CAGAAATTG TATCTTTTTT TTCTTTTTTG AGATGGAGTC TCGCTCTATC  | 120 |
| ACTAGGCTGG AGTGCAGTGG CACAATCTCG GCTCACTGCA ACCTCTGCCT CCTGGTTCAA | 180 |
| GCGATTCTCC TGCCTAGCC TCCTGAGTAC CTGGGACTAC AGGTGCGCGC CACCACACCC  | 240 |
| AGCTAATTTT TATATTTTGA GTAGAGACGG GGTTTTACCA TGTGGCCTCG AG         | 292 |

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 470 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

|   |     |
|---|-----|
| GGATGGACAT CAGCACTTTA CGGCGCCAGC TGAGACCCAC AGGCCAGCTC CGTGGAGGGC | 60  |
| TCAAGGGCTC CAAGAGTGAG GATTGCGAGC TGCCCCCGCA GACGGCCTCC GAGGCTCCCA | 120 |
| GTGAGGGGTC TAGGAGAAGC TCATCCGACC TCATCACCCT CCCAGCCACC ACTCCCCCAT | 180 |
| GTCCCACCAA GAAGGAATGG GAAGGGCCAG CCACCTCGTA CATGACATGC AGCGCCTACC | 240 |
| AGAAGGTCCA GGAATCGGAG ATCAGCTTCC CCGCGGGCGT GGAGGTGCAG GTGCTGGAGA | 300 |
| AGCAGGAGAG CGGGTGGTGG TATGTGAGGT TTGGGGAGCT GGAGGGCTGG GCCCCTTCCC | 360 |
| ACTATTTGGT GCTGGATGAG AACGAGCAAC CTGACCCCTC TGGCAAAGAG CTGGACACAG | 420 |
| TGCCCGCCAA GGGCAGGCAG AACGAAGGCA AGTCAGACAT CCAACTCGAG            | 470 |

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 637 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGTCGCTCTT GCTGAAACCT TCAATGCAGT GAGCGCCCAT | 60  |
| CTCATTGGGA CCTACAGGCT GAAGTTCTTC CTCTGATGGA CATGACCCCC GTGTTGTCTC | 120 |
| TAATAACCTC ACTTTCAGCT TGTTCCAGCC ACACGGGGTT TCTGTCTTTC TCGGGTCATG | 180 |
| TCGGGCTTAT GTGCCTCGGG CCCTTTGCTC ATGCTGTTCT CTGCCTGGGA TGCCTTTTAC | 240 |
| TGGGTGCCAG GATGGTCAGT GATTCCATTT CTCTCAGAGT CTATTCACAG GTCCCTTCT  | 300 |
| CGGTCACGCC TTCTCTGGCT CCACTGTCTA AAATTTCAAC AGCTGCCTCT GCCCCCCGAA | 360 |
| CTTCATATCC CCCTTATCTG CCTTTTTTCC TTCAGCTCTT ACTTCCATCA AATACAGTAT | 420 |
| GTATTTTAA AAGTCTTATC TTGTTACGG TCATTTTCTT CCACAGGTAA TTTTGGTAAA   | 480 |
| CTTTGTAAGA TTGATGATGT TTAATACTGT TTTGTTTAA ACAGTACCCC CAGTTTAGCA  | 540 |
| CACAGCTTTT GAATGAATGA CCAGTTTTTA TTCCCTCTG AAGCGCTAAG AGCTGCCGCT  | 600 |
| GAGGTGGCAT CTGTAGCNGC TCCCGCTCCA ACTCGAG                          | 637 |

## (2) INFORMATION FOR SEQ ID NO:676:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 513 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

```

GAACACGTCA TGAGGAAGGA GCAGCGCAAG GAGGAGAAGG AGAAGCGGCG CCTCGACCAG      60
CTGGAACGTA AGAAGGAGAC GCAGCGCCTA CTGGAGGAGG AGGACTCCAA GCTCAAGGGC      120
GGCAAGGCGC CGCGGGTGGC CAGGTCCAGC AAGGTCACCC GGGCCAGAT CGAGGACACG      180
CTGCGCCGAG ACCATCAGCT CAGGGAGGCC CCGACACAG CCGAGAAAGC CAAGAGCCAT      240
CTGGAGGTGC CGCTGGAGGA GAACGTGAAC CGCCGCGTGC TGGAGGAGGG CAGCGTGGAG      300
GCGCGCACCA TCGAGGACGC CATTCAGTGC CTCAGCGTGG CGGAGGAGGC GCGCCAGCCG      360
CACCCAGAAA GAGCATGCG GGCAGCCTTC ACAGCCTTTC AGGAAGCCCA GCTGCCGCGG      420
CTCAACAAG AGAACCCCAA CATGCGGCTG TCGCAGCTGA AACAGCTGCT CAAGAAGGAG      480
TGGCTCCGCT CTCCTGACAA CCCCAAATC GAG                                     513

```

## (2) INFORMATION FOR SEQ ID NO:677:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 376 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

```

GTCCATCCTG AGCTCCATGG AGAAGCCACC CAGCCTCGGT GACCAGGAGA CTCGGCGCAA      60
GGCCCGAGAA CAGGCCGCCC GCCTGAAGAA ACTACAAGAG CAAGAGAAAC AACAGAAAGT      120
GGAGTTTCGT AAAAGGATGG AGAAGGAGGT GTCAGATTTC ATTCAAGACA GTGGGCAGAT      180
CAAGAAAAAG TTTCAGCCAA TGAACAAGAT CGAGAGGAGC ATACTACATG ATGTGGTGGG      240
AGTGGCTGGC CTGACATCCT TCTCCTTTGG GGAAGATGAT GACTGTGCGT ATGTCATGAT      300
CTTCAAAAAG GAGTTTGAC CCTCAGATGA AGAGCTAGAC TCTTACCCTC GTGGAGAGGA      360
ATGGGCCCCC CTCGAG                                     376

```

## (2) INFORMATION FOR SEQ ID NO:678:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

```

GAATTCGGCC TTCATGCCTA GCAGGAGGTT TTATTGTAAA GAGGCCGATT GTACAGAGCA      60
AAGATTGTTT TGACACGGGG GGCTGGGTGG TGGGACCCAG AGGCCAGAGC TGGGTGAAGG      120
ATGAGGGGTG GCATCGCCCC ATCCAGGCAG TGGGCAGGGC AGGGAGGACT AAACGGCTGC      180
CTCCCAAGTC CCTTCCCTGC CCCTCATTAC TGGGTAAGAG GGAGCCAGGC TATTTCCACG      240
GATCCAGGAG AATATAGCAG GAGACCTCA CCACCCACA CCATGCCCA AGGATACGGG      300

```

AGGTGCCCCA GTCTGGCTTT TGCAGTCGGC CAGCTCCCAG CCTCCTCGAG

150

(2) INFORMATION FOR SEQ ID NO:679:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 357 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

|             |            |            |            |            |            |     |
|-------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC  | TTCATGGCCT | AGTTCTCACC | GGGGAAAAAC | CCACTGTTAG | GATGGCATGA | 60  |
| ACATTTCCCTT | AGATCGTGGT | CAGCTCCGAG | GAATGTGGCG | TCCAGGCTCT | TTGAGAGCCA | 120 |
| TGGGCTGCAC  | CCGGCCGTAG | GCTAGTGTA  | CTCGCATCCC | ATTGCAGTGC | CGTTTCTTGA | 180 |
| CTGTGTTGCT  | GTCTCTTA   | TTAACCGTGC | TGAGGCTCCA | CATAGCTCCT | GGACCTGTGT | 240 |
| CTAGTACATA  | CTGAAGCGAT | GGTCAGAGTG | TGTAGAGTGA | AGTTGCTGTG | CCCACATTGT | 300 |
| TTGAACTCGC  | GTACCCCGTA | GATACATTGT | GCAACGTTCT | TCTGTTATTC | CCTCGAG    | 357 |

(2) INFORMATION FOR SEQ ID NO:680:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GGGGGTGGAA | GGCGTAGTGC | TTGAAATGCA | GGGATCTGGC | AGTCAGCAGA | AGGATCTGAG | 60  |
| ACCCAGTGTC | GAGGTTAAAA | AAAAAACAAA | AAACCAAAAA | CCAATGCAGG | AATCCAGTGG | 120 |
| GTGGAGTGAG | GGGATCTGGG | ATCCAGTGAT | GGGGGCCCCA | GGATCCAGGC | ATTGTGGTTG | 180 |
| TCAGGATCCA | GTGGTGAGGT | TTGTTGACAT | CCAGAATCCA | GCAGCTGAGC | TTGGAGATCC | 240 |
| AGGGCTCGAG |            |            |            |            |            | 250 |

(2) INFORMATION FOR SEQ ID NO:681:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| GGATTCCTAC | AAAAATTGAG  | GCAGAAGATC | AAAATCGGAG | TGCTAGGCGG | ATCGGACTTT | 60  |
| GAGAAAGTGC | AGGAGCAACT  | GGGAAATGAT | GAATATTCAA | AGTCATCTGG | GTGAGGCCCT | 120 |
| AATCCAAGAT | TTAATCAACT  | ACTGTCTGAG | CTACATTGCG | AAAATTAAAC | TCCGAAGAA  | 180 |
| GAGGGGTACT | TTCAATTGAAT | TCCGAAATGG | GATGTTAAAC | GTGTCCCCTA | TTGGAAGAAG | 240 |
| CTGCAGCCAA | GAAGAACGCA  | TTGAGTTCTA | CGAACTCGAT | AAAAAAGAAA | ATATAAGACA | 300 |
| AAAGTTTGTA | GCAGATCTAC  | GGAAAGAGTT | TGCTGGAAAA | GGCCTCACGT | TTTCCATAGG | 360 |
| AGGCCAGATC | AGCTTTGATG  | TCTTTCCTGA | TGGATGGAAA | CTCGAG     |            | 406 |

## (2) INFORMATION FOR SEQ ID NO:682:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACCCTTCTAG | GTGTCATCTC | CTTCCCTCCC | TTTCCCCCAA | 60  |
| GACTCCCTCT | GGGCCCAGCC | AGCAGGTGAA | GCCTGACTTA | GGGAAGGGGG | GATTTCCAGG | 120 |
| GGAGGGGCCC | TGGCCCCCAC | TGACCCAGCA | TTGCTATCCA | CAGGAGGAGC | AGCCCCACA  | 180 |
| ACATCGATCC | AAGAGGGGGG | GCTCAGTGGG | CGGCGTGTGC | TACCTGTCGA | TGGGCATGGT | 240 |
| CGTGCTGCTC | ATGGGCCTCG | TGTTCGCCTC | TGTCTACATC | TACAGATACT | TCTTCCTTGC | 300 |
| GCAGCTGTCC | CTCGAG     |            |            |            |            | 316 |

## (2) INFORMATION FOR SEQ ID NO:683:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC | TTCATGGCCT | AATTGAATTC | TAGACCTGCC | TCGGCCTCCC | AAAGTGCTGG  | 60  |
| GATTACAGGT | GTGAGCTAGC | ACTCCCAGCC | GACAGGTGCT | TCTTAAATGT | TTTCTTTGAG  | 120 |
| CAGGAATTGG | TCCAGGAATT | GGTTCTCAAG | TTAGAAGGAA | AATTTGAGGG | GAAGAAGTTG  | 180 |
| TTTTTTCTCC | AATCAGTCTC | TGATTAAATA | GTTATTAGGA | AAAACCTCCT | GCTTATGTCT  | 240 |
| TTGTATTGCA | CATTTTATA  | TATGTATATA | TGTGTAATA  | GAGATATTTA | TATATTACACA | 300 |
| GACAAACACG | TGTATGCACA | TTTACAATG  | GAGGAAGAAG | GGATATGGTG | TGCACTGAGG  | 360 |
| TAAAGTGAGC | AGGGATACAG | AAGAGAACT  | CGAG       |            |             | 394 |

## (2) INFORMATION FOR SEQ ID NO:684:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GTCCTAACCT | TGGGTCCAAG | TTTCGTTATA | GTGGCAGGAC | ACAAGCGCAA | ACGAGAAGAG | 60  |
| CCAGTGCGTT | GATAGATCGC | CCAGCACCTT | ACTTTGAACG | CTCATCCAGC | AAACGTTATA | 120 |
| CCATGTCTCG | CAGCTTGGAT | GGAGCATCAG | TGAATGAAAA | CCATGAAATA | TACATGAAGG | 180 |
| ATTCTATGTC | TGCTGCAGAG | GTTGGTACTG | GCCAGTACGC | CACAACAAAA | GGCATCTCTC | 240 |
| AGACCAACTT | GATCACCCT  | GTGACTCCGG | AGAAGAAGGC | TGAGGAGGAG | CGGGACGAGG | 300 |
| AAGAGGACAA | ACGGAGGAAG | GGGGAAGAAG | TCACGCCCAT | CTCGGCCATC | CGGCACGAGG | 360 |
| GAAAGACTGA | CAGTGAGCGC | ACGGACACCG | CAGCCGACGG | GGAGACCACC | GCCACTGAGT | 420 |
| CGGACCAGGA | GGAAGATGCA | GAGCTCAAGG | CACAGGAGCT | AGAAAAAACT | CAAGATGACC | 480 |

TGATGAAACA TCAAACCAAC ATTCTCGAG

509

## (2) INFORMATION FOR SEQ ID NO:685:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```

GAATTCGGCC TTCATGGCCT ACCAAAGTGC TAGGATTACA GCGGTGAGCC ACTGCGCCTG      60
GCCTCTTTCT TCTTTCTTGA ATTCTCTTCT TTTTATGTTT CTGGGAAAAT CCTACTCATT      120
TTATATGATT TGGCTGATGT AAAGCCACCA TTGTCTTCCT AAGCAGAGAG GGTCTTGCTT      180
TTGGGTGCTG CACAACCTTG TGCAATTTTT CTGTTACATC ATTTATCTTT TGGGGATTGT      240
TTATTTTCAT ACTTATCTCT CTTCCAGGAC CATGTTAGGG AGAGGTGTTT TTAATTTTAA      300
CCTTTTCTGC AGCACTTAGC ACAGTGCCTA ATCATAGTAA ATATCACGTA AAAGTTGAAT      360
GAAGGAATGG ATGTTTGATA TAGAGTTAGG ACACCTGTGT CCAGGTCTGG CTTTGCTTTT      420
CCTTTNACCC CCCACCTCGA G                                     441

```

## (2) INFORMATION FOR SEQ ID NO:686:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```

GAATTCGGCC TTCATGGCCT AGTTGGTTTA TGTTATGTAA AGTTATGTAG TTATGTAAAG      60
GTGCTGAAAT GTCACCTCTG TGATTATGTT TTATTATATA AGGCTCTATC TTAGCAAACC      120
AGGAGAGAAA TTCTCCTGAT GGCCTTGAAG AAGCAAACAG CCACCTGGTT AAGCCCCTGT      180
GGATAGTGCC AAGTGGCAGG AAAGTGGGAG CCACCTCTAG GACCTGAGGA TTAAGTCAG      240
TAAGAGCTGG GACCTCACTC ATGCAGACTC GAG                                     273

```

## (2) INFORMATION FOR SEQ ID NO:687:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC AAAGAGGCCT AGGGCTCTGG ATTTTGAGTT TCGGGCTCTA GATGGAATTG      60
AGAAGGTCCA ACTTGCTCAG AGGGCCCTGG AGGCTCATCT GACTTCACCC GGATTTTCCT      120
CGAG                                     124

```

## (2) INFORMATION FOR SEQ ID NO:688:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```

GAATTCGGCC AAAGAGGCCT ATGCCATCTT AGTCCCTCTT CCCAACCCCA TTTTCTAGTT      60
ACTTTCCTTT CATTAAATA TCCTTATGCA CTTACAAATA AAACCTAAGTC CCAAGAGGGC      120
AACAAAATAT AAGATTCTTA ATGATACAAA AACAAATCTT TCTGATACTA GATCTTTTAT      180
ACTAGAAAAA TAAATTCTTG TGCTTGAACA TCATTTTAA GCACTTAGTG AATTGAGAAT      240
CTGAACCTGCC ACTTGAATA TTCCCGGAA AGAAACATTA TGAACCAAT GAAGGAACAT      300
AGCTATTCAA AGGACATAT TTTGTACTT GTTTGCTCC AATTCTGCT ACATAGACTG      360
CTCCAGTCTT TCTGTCGACT CTAGGAGATG CCTAACCGT CGATTGAATT CTAGACCTGC      420
CTCGAG                                         426

```

## (2) INFORMATION FOR SEQ ID NO:689:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```

GAATTCGGCC AAAGAGGCCT ATAGTTTTT CATGTTACAT CTTTATAGATT ATTTCTTTT      60
TAATCTATCT GTGACTATAT TTAAAGTCAA TTCTTGTTTT TTCCTTTTCC TTTTGTGGG      120
TAACGGGGTC TCGCTGTGTT GCCCAGGCAG ATCTCAACT CCTGGGCTCA AGCTGTCTC      180
CCACCTCTGC CACCTAGGC TCGAG                                         205

```

## (2) INFORMATION FOR SEQ ID NO:690:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```

GAATTCGGCC AAAGAGGCCT ACGTTGATTG AGCACTGAGC CCTTACTACG TGCTAGGCAT      60
GGTACATGCA TGGCCTTATT TAATCCTATC AACCTCGAG                                         100

```

## (2) INFORMATION FOR SEQ ID NO:691:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```

GAATTCGGCC AAAGAGGCCT ACATCATACA AGTCGTCGTA AAGCAAATCT GAGCTGTTGT      60
CATTGGAAGG CACTTTAGTT TTGATGCAGT ATTCCGCCAG GGTGTGTTGGG ACCTTCACTC      120
CATCCTTTTC TGCTTCGGCC TTAGTGGCTG AAACCTGTTT CCTAATAATT TCAGCATATT      180
CTTTGTCTTT TCCTTTACTG TCTCTCCATT TCCTGAACAT AACTGAAGCA TCGACATTGG      240
CTGGGGAGAA GGTGTGCGC TCATTAAGCA GTGAGATTAC ACTTAATAGG ATAGTCCTCG      300
AG                                                                                   302

```

(2) INFORMATION FOR SEQ ID NO:692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 662 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```

GAATTCGGCC AAAGAGGCCT ACCAAATACC AGGCTACCAT GGTCTACAAG ACTCTCTTCG      60
CTCTTTGCAT CTTAACTGCA GGATGGAGGG TACAGAGTCT GCCTACATCA GCTCCTTTGT      120
CTGTTTCTCT TCCGACAAAC ATTGTACCAC CGACCACCAT CTGGACTAGC TCTCCACAAA      180
ACACTGATGC AGACACTGCC TCCCCATCCA ACGGCACTCA CAACAACCTG GTGCTCCCG      240
TTACAGCATC AGCCCCAACA TCTCTGCTTC CTAAGAACAT TTCCATAGAG TCCAGAGAAG      300
AGGAGATCAC CAGCCCAGGT TCGAATTGGG AAGGCACAAA CACAGACCCC TCACCTTCTG      360
GGTTCTCGTC AACAAAGCGGT GGAGTCCACT TAACAACCAC GTTGGAGGAA CACAGCTCGG      420
GCACTCTCGA AGCAGGCGTG GCAGCTACAC TGTGCGAGTC CGCTGCTGAG CCTCCACAC      480
TCATCTCCCC TCAAGCTCCA GCCTCATCAC CCTCATCCCT ATCAACCTCA CCACCTGAGG      540
TCTTTTCTGC CTCGGTTACT ACCAACCATA GCTCCACTGT GACCAGCACC CAACCCACTG      600
GAGCTCCAAC TGCACCAGAG TCCCCGACAG AGGAGTCCAG CTCTGACCAC ACGACCCTCG      660
AG                                                                                   662

```

(2) INFORMATION FOR SEQ ID NO:693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```

GAATTCGGCC AAAGAGGCCT AAGCCCCCAA AACACGCTCT TTTGTGCTC CCCTCAAATC      60
CTTCACAGTG TTCTTCCATA TCCACTCCTT CCAGGAAGCA TGTTCTCACT ACCCCAGTTC      120
ATGTGGGTTT CTTCCCTCTC AGAATTCTA TCATGCCCTT ATAAGTTTAG CAAATTGTCC      180
TTCTCTAATT GTTTCACATC TGTCCATCCG ATATCCCAGG AGGACTGTCA GCTCTATGAA      240
GGCAGGGGTT GTCTTTCCTT TACCATGCCT ACCATGCCTT ATAGTGTTAA TAAATTAACC      300
TACCCAGAAA TGTTTCTCGA G                                                                                   321

```

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

```
GCGATTGAAT TCTAGACCTG CCTCAATCCC CTCCTACTT GCTTTTCTT AGCATATAAA      60
AGTCCACAAG TTTTACTCAT CTTTTTAAAA AACGAAAACA TCCTTAGACC GTGTCCTCCA      120
TTAGTTGCTA TCCTGCCTTC TTCTCTCAGC TGAGCTGTCT GAAACATGCT AACATGCTTA      180
TACAATACTT GCTGTCTGTC CTTCTGCTCT CAGCTGAGCT CTCTGAAACA TGCTAACATG      240
CTTATACAAT ACTTGCTGTC CTGCCTTCTC CTCTCAGCTG AGCTCTCTGG AACATGCTTT      300
TTATACAATA CTTGCTGTCC TGCCTTCTTC TCTCAGCTGA GCTCTCTGGA ACTCGAG       357
```

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

```
GAATTCGGCC AAAGAGGCCT ATGGGTTTTT AAAAATTTTG TTTTATTTT TTCCTTTGAT      60
GTGCAGAGGC TGTTACTTTT GATGCAGTCT CACTTGTTTA TATTTTATT TGTTGCTGGC      120
CTAGGCCTCT TTGGCCGAAT TCGGCCAAAG AGGCCTAGTC GGGTGTGGCA GTGCCATTCT      180
GCAGTCCCAG CCACCGGGA GACCGAAGCG GGAGGATCAC TCGAG       225
```

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

```
GAATTCGGCC AAAGAGGCCT ATCCGCTTCT GTTGCAGCTG GCGGTGCTCG GCGCGCGCGT      60
GGCGGCCGCA GCCCTCGTAC TGATTTCAT CGTTGCATTT ACAACTGCTA CAAAAATGCC      120
AGCACTCCAT CGACATGAAG AAGAGAAATT CTCTTAAAT GCCAAAGGCC AGAAAGAAAC      180
TTTACCCAGC ATGGGACTCA CCTACCAAC AACTTTCTGT CGTTGTGCCT TCAACAATG      240
AAGAAAAACG GTTGCCTGTG ATGATGGATG AAGCTCTGAG CTATGTAGAG AAGAGACAGA      300
AACGAGACCT CGAG       314
```

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACAGAGTGTG | GACGGCCAC  | TGGGTTGGTG | GTGGTGGGTG | 60  |
| CCCGTCACAG | GGCTGGAGGT | GTGGCCGGCC | CACTGGGTTG | TGCTTTCTGC | CGTACGTCCT | 120 |
| TCCCCATGAG | GATGAGATGA | CCCATCTGTT | GCATCCCGGC | TGCTGATAAA | ACAAGACCCT | 180 |
| CGGAGCCAAG | AAACAACACT | GAGTTCCAGA | TTTCGGAAGG | TTCACGAGTG | TTGCCGACAC | 240 |
| GCCCTCCCAA | CTGCAGACAT | CCTCCCTGGA | GGACCTGCTG | TGCTCACATG | CCCCCTGTG  | 300 |
| CAGCGAGGAC | GACACCTCCC | CGGGCTGTGC | AGCCCCCTCC | CAGGCCCTC  | GAG        | 353 |

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGATTGACAG | AGGTCAGTTG | TCACTTCTTG | CCTCTCTCCC | 60  |
| CTTCCAGCAA | CATGTATAAT | CCTGTGAGTG | TTTCTTCAGC | ACCCTTCTCT | GTGTTTACA  | 120 |
| CTACTGCAAG | AGCCTCCCTA | AGTGGTCTGC | CTGTTTCAC  | CCTGTTGTCT | TGGAATTAG  | 180 |
| TTTCTCGCA  | AAAGCCAGAG | AATGTTTCA  | GAAGGTAGCT | CTTGAGCAAC | TTCCACTTT  | 240 |
| CTTGGAGGGG | AGATCCAGCT | TCCCAACAA  | GACCAGCAGG | CCCCTGTGCG | GCCTGGCTCC | 300 |
| TGTTACCCCT | ACCAGTCTTG | GCTCAGGCTC | ACGGCTGGAA | TATGCCGAGC | TCTTCTTGT  | 360 |
| CCTGGGCGCT | TTGCACTTGG | CTTCCCTCTG | TCCAAATCA  | TCTTCTGTGA | GCTTTGTGCT | 420 |
| TGCCTAGCTC | ATCATCATAG | CAGCTCGAG  |            |            |            | 449 |

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

|             |            |            |            |            |            |     |
|-------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC  | TTCATGGCCT | ACAGAGAACT | GAGGAAAACC | AACTACGTGG | AGAATCTCAA | 60  |
| AGAAAAAAGC  | GAGGGAGAAG | CTTCACTGTA | TGAAGATAGA | ATAATAACAA | GAGAGAAGGA | 120 |
| CATGAGGAGA  | GTGAGAGATG | AGCCCGAGAA | GGTGGTGAAG | CAGTGGGACC | ATAGTGAGGA | 180 |
| TGAGAAAAGAG | ACAGATGAGG | ACGATGAGGC | TTTTGGGGAA | GCTCTGCAGA | GCCCAGCAAG | 240 |
| CGGAAAGCAG  | AGTGTGGAAG | CAGGAAAAGC | CAGAAGCGAT | TTGGGAGCAG | TTGCCAAGGG | 300 |
| CCTGTCAGGA  | GAATTAGGCA | CAAGATCAAG | AGGGCTCGAG |            |            | 340 |

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

```

GAATTCGGCC TTCATGGCCT AAGCCAAGCA AGGCTGTACC TTAAATTACT GCTGCCCTCA      60
TTTGCATCTG GCTGCCCTCA TTATAGTGCT ATTAGCAGAG TGCAGGGGTC CTCCTGCTGG      120
CCCATCGGGA GTGGTGCGTG CACAGTTGTG GGGCCTTGCT TTGGTGGTCT TTGCTGCCTT      180
CTGGGCAAAA TGAAGGATTG GGAGTAGACA GCAAGCAGGC ATACATCCTG GGCCAGAAGC      240
AGCCTGCGGA GCTCATCGTG GCTTGCTTA AATTGTTTCT CAACAATAAA GTTGTGAAAA      300
AACAAATTGT GTTTTCTTTC TCCTTATTAA AAACCCAAAA TTATATTCAT TATAGAAAAAT      360
TAAAGAAGAT AGCTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCAGCCTCCC AAAGTGCTGG      60
GATTATAGGC GTGAGCCACC GCGCCAGCC GAAAATCTAA AGATATTGAA AAGATACAAA      120
GGAGCACATT ATGAACATTT TTTTCGTATC ACTGAGTATT TTATACTGC ATCATTTGATT      180
TTAAAAGAAT TCATGACTTT GAAAACATAA ATTCTACAAA GTAGCTTTTG ATTTAACATG      240
AGATTTTATA TATGTGCTTA TCTTGTTCT CTATGAAACC CCATTGAAAT AAGAAAAATGT      300
AAACACCAGC CAACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

```

GAATTCGGCC AAAGAGGCCT AATAGTCAAG ACCTTTGCAG TTTTGATCAC AGAAATATGA      60
AAGATTACAC AGCTACAGCT ATATGAATGA TAAAAGTGAC AGCTATGGAT TTTTAAAGTT      120
ATAAGTTGCT ATACTACATA TATGTAATGT GTGTGTGTAT AGTGTGTAGG TATATATATT      180
TATATTTATA CACACACTAT ACATGTATTT TAAAATATTG AAAATCCAGA ATTATTTTAT      240
GGTAAAAATT ACTAAAATTG ACTTCACATG CTGAATGAAG AGAGCCTGAG TAGACCAACA      300
AACAAATGAA AAATTAAGAC GGTTAGAAGA TACGCTTTCT AAAAGAATAC ATTTAGAATC      360
TAACCTTAAA AAAAAAAAAA CCTACTCTCC TGAGCCAGAG TGGTCTCAGA GAGACTCCGA      420
GAACCTAATT TTTTACAAGT AAAATCTTTG AAGAATTGGT AATTGCTAAA TTTTCCAAC      480
ATACTATTCT ACAAGACTAA CCTAAAAC TG ATTATAAGAA CTAGGTGAGG AGGGCCGGCA      540
AACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 758 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

```
GAATTCGGCC AAAGAGGCCT ATCGAGCCAC TGCACCTGGC CGATGTGTTT TGTGAAAT      60
CTTACTCAAA AGTATTTGAA GAGTTGTGTA TAGTTGTATG GATATGTCCT TAGTAAACAG      120
AAACAAATTG CTTTCAGTTT TCTTTACTTA TTTTCTAGGT TACAGTACCT TTACCAGCAT      180
CCCAGCTTTC CTTGCCTAAT TTTGGATCTA CAGGGCAACC TCTAATTGCT TTGCCTCAGA      240
CTCTTCAGCC CCCATTACAG CATAACCTC CCCAAGCACA GGCTCAGAGT CTGAGTCGTC      300
CTGCACAAGT AAGCCAGCCT TTCAGAGGAT TAATTCCTGC TGGAACACAG CATAGCATGA      360
TTGCAACCAC CGGAAAAGTA AGTAAAGAGA CATTTCACAC GGTTATTTGA GAATTTAAGG      420
TAGTGTGTTT AGATATATGC ATCTGTGTTA TCTAAAAAAC TAAAATGCGT CAGTTTTTAC      480
CACCTTGCAA AAATCTCAAA CCCAGTATA TTTACATTTT ATCTATTTAC TTTTAATGTG      540
TTTGGCCCCA TCTAGTTTTT ACCTAATAAC AAAGAATTCA CAAATTTATT GGAAGAATTG      600
GATTTATAGT GTCTCTTCGG CTTATTTAAT TATAAGTCTG TTTGGTCAGG TAATTCCTATA      660
ATACTTGAAG CCTAACTATA GGAGTTTGT ACTAAGGTTC TTTGCCCTTT CCTAGATTAC      720
GTCTTCACGT ATAGGACATG TAAACACAGC AACTCGAG      758
```

(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 663 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

```
GAATTCGGCC AAAGAGGCCT AAGATGGCCT TCCCATGTTA TGGCTACATG GCTGTGATAA      60
CAAGTAGAGT TATGTGTCTG CGCTCTAAAC TCACTGAGTC TTGCAGGATG TAAACATCCT      120
AGCTCAGCCT ATCCTTGACC AAAGCACANT CATGCTCCTT ACAAACCTCA ACCAGCCTGC      180
ACACTGGGAG GAGCGCGTGC TGGGCTAGAG CCACAGAATT TTGTACCGTT GGCAGCAGGG      240
AGGAGCCTGG CCCCTCCTTT CCTAGGTAGA ATCTGGAATT CAATCTGTGA GGTGGGAAGC      300
ATATACTAGG AGGACTTTCA CTCTGCTGAG TCCCTGTTCC CCCTCCCTTT TTTTCCTTT      360
TTGCCCAATA AACCCTTTA TTCTCACACT TCAAATTGTC TGTGAGACTA ATCTTTTGTG      420
GCCATGTGAC ATGGACCCTG TCTGTAGCTG AAATAAGAA AAAGCCCTC CCGCACAGTC      480
TGATGTTTCC TCAGTCAGAC ACTGCAAGCT GTGATGTTGG GGTGAGTACA GGATATTTGG      540
CAATATTGTC AGACAGTTTT GGCTGTCAGA GAGGAAGATG CTGTATGCAG ACACACTTGA      600
CAGCAATAAC TTAAGCCAC CCTGAGACTG ACTCTGCATG GTGATGCACC TGAAGGCCTC      660
GAG      663
```

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 334 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

```
GAATTCGGCC TTCATGGCCT AGAGCGATGT CAAGTGATCT GCCCGCCTCA GCTCCCCAAA      60
```

```

GTGGTGGAAT TACAGGCGTA AGCCACTGCG CCTGGCCCCA AGTGTCATT TTTTAATTTA 120
GTAATTCTAA CCTAGGTATT TTTCCTGCAG TACAAAATGA GGATAAAGCT TTACATGAAA 180
ACATGTTGTT CCTATTATGT TTATTGCAGC AAAAACACAA CCTAAAAACC CAATCTGAGC 240
AGGTTTAAAC TAAATACTAA TAATTCTGAC ACTAGAACGT TATGTAGCTA ACAAAAATAT 300
GTCGTAAAAA TAATCATGTA GAACTGGCT CGAG 334

```

## (2) INFORMATION FOR SEQ ID NO:706:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 369 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

```

GAATTCGGCC TTCATGGCCT ACCGAGCTTC AGAGCATCAG CAGTGTTCCT CCTTCACTGT 60
GACGCTTGTC CTCACCTCCC AGGTGAGGAG TCTAAGAAAA CAGCCTTTCC ATCAGCCCCCT 120
GTCGTGACAG ACCCTCCAGT GGGATGGTAG TGGCTGCCTC ACCCATTTAC AGGGCAACCC 180
AGTTTGTCTC CTTCTGCCTT GAAATTTGTT CCTCCCAGAA ACTGTCCCTC ACAAGGCATG 240
AACAAATCAAT AGAAGATATA CGTGGTCTTC CCAGCACTAC AGGTGCAGAA TGAGCTGTGG 300
AGTGCCCCGT CCGGAGTCCT GAACAGCTTC AAACCTTTCC CCTTTAGAAA TGCCTAACAC 360
GCCCTCGAG 369

```

## (2) INFORMATION FOR SEQ ID NO:707:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 365 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

```

GAATTCGGCC TTCATGGCCT AGGCATCCTT GGTGCGGCAT CCTTGGTGCA TTATATCAGG 60
AGGCAAATGA TGTGGGTTTG TCCCATTTGT TGTAATGGTA ACATTGGTTG CTTGGTTAAG 120
GTGAAGGGTG CCAAGCTTCT CCACTGTAAA GTTCCTATTT TTTTCTCTGT AATTAATAAG 180
TAATTTGTAT GATACTTTGA GATAACAAAG TAGACTGTTC ATCAAACCTT CATCAATGAA 240
TTTAACATCC AAAGACGCCT CAAGAATGAT CATCAAAAGC AGCCTACTAA TGACTGTCTAT 300
TTACCATTTA ATACATTTCA AACAGTGCAC GTGCTCTGTG ACATATTCTG GGAAGGAATC 360
TCGAG 365

```

## (2) INFORMATION FOR SEQ ID NO:708:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 436 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

```

GAATTCGGCC TTCATGGCCT ACACAAAGCT TCTGGAGGAC AAACGGGAGC AGTTGAAGAA 60

```

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAGCAAAGAG | CATGAGAAGC | TGATGGAGGG | AGAACTTGAA | GCTTTGCGGC | AGGAATTTAA | 120 |
| AAAGAAAGAC | AAGACGTTGA | AAGAGAATTC | CAGAAAGTTG | GAGGAAGAAA | ATGAGAATCT | 180 |
| CCGAGCAGAG | CTACAGTGT  | GTTCTACACA | ACTGGAATCC | TCTCTCAACA | AATACAACAC | 240 |
| CAGCCAGCAA | GTCATCCAAG | ACTTGAATAA | AGAGATAGCC | CTTCAGAAGG | AGTCCTTAAT | 300 |
| GAGCCTGCAG | GCCCAGCTGG | ACAAAGCTCT | GCAGAAGGAG | AAGCACTATC | TCCAGACTAC | 360 |
| CATCACCAAA | GAAGCCTATG | ATGCATTATC | CCGGAAGTCA | GCCGCCTGCC | AGGATGACCT | 420 |
| GACACAAGCC | CTCGAG     |            |            |            |            | 436 |

## (2) INFORMATION FOR SEQ ID NO:709:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GCTGCTCTAT | ATCTTAGAGA | AAATAAAAGA | ACCACATGTT | GCTTCCCTGC | CTGCAAGCTC | 60  |
| TTCTGAATTC | ATCACCATTC | ATGTTCTTTC | CTTCAGGGGA | AATGAAGGCA | GATTGTTCTG | 120 |
| TTGGTGCTCA | CAGATCTCTT | TCTGTCTGA  | TACCTCTCTC | TTCCTCTCCT | GCTTCTTTCC | 180 |
| CTTCATCATG | TGCTCCTATA | CAAGTCTCTC | CCAACCTTAA | AACAAAAACA | AACCCCTCCC | 240 |
| TAAATCTTGT | GTTTGTTC   | GCCATTAGAC | TGTATCGTCC | TGCCCATCCA | CGTTATTGGA | 300 |
| AGAAGGCCAG | CTCACCTCTA | CTCCCTTTCT | GCCCTTTCCC | TCTTAATCTG | CTGCTCTCTG | 360 |
| ATTTCTGCCC | CCACAACTC  | GAG        |            |            |            | 383 |

## (2) INFORMATION FOR SEQ ID NO:710:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGGGCCTGA | AGATCTTCGG | GTATTTGGCT | CCCAGAATCT | 60  |
| GACCACAGTG | AAGCTAAAAG | GGGTGGGTGA | CAGCTTCAAG | AAGTATCCTG | ACTACGAGTC | 120 |
| CAAGGGCATC | AAGGCTCACT | TCAACCTGGA | TGAGAGTGGC | GTGCTCAGTC | TAGACAGGGT | 180 |
| GGAGTCTGTA | TTTGAGACAC | TGGTAGAGGA | CAGCGCAGAA | GAGGAATCTA | CTCTCACCAA | 240 |
| ACTTGGCAAC | ACCATTTC   | GCCTGTTTGG | AGGCGGTACC | ACACCAGATG | CCAAGGAGAA | 300 |
| TGGTACTGAT | ACTGTCCAGG | AGGAAGAGGA | GAGCCCTGCA | GAGGGGAGCA | AGGACGAGCC | 360 |
| TGGGGAGCAG | GTGGAGCTCA | AGGAGGAAGC | TGAGGCCCCA | GTGGAGGATG | GCTCTCAGCC | 420 |
| CCCACCCCT  | GAACCTAAGG | GAGATGCAAC | CCCTGAGGGA | GAAAAGGCCA | CAGAAAAAGA | 480 |
| AAATGGGGAA | CTCGAG     |            |            |            |            | 496 |

## (2) INFORMATION FOR SEQ ID NO:711:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGTATGGAAG | GTGGAACTAA | AACTGAAATG | ATCAGTTCAC | 60  |
| ATATTTGTAA | ACTGCGTATT | TTATATCAGT | CGCTGGATTA | GGCCCCTAGA | GACAGTGGTG | 120 |
| GCTAAGTGAT | AAAGTCTTTG | CGCTTGTTGG | ATTTTATAGT | GTAGTGGGAA | GACAGAAAGC | 180 |
| AAACAAGTAG | AGAATCATAT | ATGTAATGTG | ACCTCAGGTC | CAGCTAAGCG | CCAGACAGAA | 240 |
| GAAAAAAGTA | AGGTGAAGGT | AGAGGGGTTG | GAGCAGGAGG | AAGGTGTTAT | TTTAGGTAAA | 300 |
| GTGGCCAGGG | AAGGCCTTTT | GAAGAATTGA | TATCGATTCC | AAAATGATGA | GAAGGTGCAA | 360 |
| TTGTGCCACC | ATGGAGGAGA | AGAGCTTTCT | AGGCAGAGGG | CAGGTGCAAA | GATGGTAGGA | 420 |
| ACAAACACGG | CTTGTGAAA  | GAACAGCAAT | GTTTGAGGAA | TGAGCCAGAC | TCGAG      | 475 |

## (2) INFORMATION FOR SEQ ID NO:712:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

|            |            |            |            |             |             |     |
|------------|------------|------------|------------|-------------|-------------|-----|
| GAATTCGGCC | TTCATGGCCT | AATTTTGCAT | AAAACCTCAT | CAATCTCTGC  | CAATCACTGA  | 60  |
| GCCCAAACCC | ATTTTCACTT | TGTTTTAGGT | ATTATAATA  | ACAGCACTCC  | CACCTTCTCAT | 120 |
| GATCAATTC  | CATCTTCAGC | GGTTCAGGCT | GCTTTAATA  | AGTTCCATA   | CCTGAGTGGC  | 180 |
| TTTAAATAA  | CGGAATGCAC | ATCTCACAGT | TCTGGAGGCT | GGAAAGTCCAA | CAGCAGAGTG  | 240 |
| CCAGCATAAT | TGGGTTCTGG | TGAGAGAGCT | CTCTTGGGTT | TCAGACTGCT  | GCCTTCTCAA  | 300 |
| TGCAGCTTCA | CATGGTGGAC | AGAAAGAGCT | CTCAAGAGTC | ATTTTAAAGG  | GCACCAATCT  | 360 |
| AATTTATGAA | GCCTCCACCA | TAATAAGCTA | ATTACTTCCC | AAAGTGCTGA  | GATTACAGCT  | 420 |
| GTCAGCCACC | GTACCTGCCT | GGGAATTTTT | TTAAAGCTCA | AATTGGATAA  | GAGGGTTATA  | 480 |
| GGAATATATT | CATCTATCAT | ATAGAAAAGA | ATATGTGCTC | AGTCCCAGGA  | AATAGAAAAT  | 540 |
| ATATTACCTT | ATTTATACTG | TTTAAATTAA | TGCTTTTTAA | AATCTGATTA  | ACTCTGGGAG  | 600 |
| AGCTCGAG   |            |            |            |             |             | 608 |

## (2) INFORMATION FOR SEQ ID NO:713:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCTTGGCCT | AGTGCACTCC | TGTAATCCCA | GCTACTCGGG | AGGCTGAGGC | 60  |
| AGGAGAATCA | CTTGAACCCA | GGAGGTGGAG | GTTGCAGTGA | CCCAAGATCA | TGCCACTGCA | 120 |
| CTCCAGCCTG | GGTGACAGAG | CGAGAACGTC | TTTAAAAAAA | TTAAAAAAA  | AAAAAAAAGA | 180 |
| TTGCACAAAT | CAGACAGTGA | CCCAGAGCTC | AGCCTTGAGG | AAAGTCAGTG | TTGGGGAGGG | 240 |
| GAGGGCAAAG | AAGCAAGTAA | AGGTTTAGCA | GACATGGCAC | CTCAGTCTGG | ACTTGAAGGA | 300 |
| GGGCTAGGCA | CAAAGGAAGG | GGAACATGTC | AGATGAGAAA | CACGTGAAGG | TTAGCCAGA  | 360 |
| TGAGCAAGGA | AGGTGGTTA  | GAAAGAGGAG | CTGCTGGTGT | GGCTCCTGTG | AACACAGGTA | 420 |
| GATAGGGCAC | GATAGAGTCA | GGCAGTTAGA | AGCCAAGCTG | AGGAATCGAC | ACTTGATTCC | 480 |
| ATAGGTAAGT | AGGGGAACCT | GAGGATGTTT | AATCAGAAAT | GAGATCTCGA | G          | 531 |

## (2) INFORMATION FOR SEQ ID NO:714:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```

GAATTCGGCC TTCATGGCCT AATTTATCCC ATCCTTATCC CATCCTTATA AGGAATAATG      60
TATTGAATAA AGATTGTATC AGTATTGTGA ATTCAATAAA CCAGAACTTG TGGAAATAAA      120
TATGTAGGAG ACATAAATAT GGTGTCCTCA AATTGAATTA TGTGGGAAAA AAGTGGGGTG      180
GAGTTAAAGT CCAAGCCAAT AAAGTTGTAA CATTAAAGAA AGACAGGTAT GGGATGCAAG      240
GTGCAAAGAA AAGGTCATCA TATCTCATA TGGGGTGAGA TAGAAGACTT CCTGAAGTAG      300
GCGATGCCTA TATTGAATCT ATAAGGACAA ACTGGCATCA ATATGTCAGG GAAGACAGGT      360
TGAAGGTGGT CCTGCCAGAG AAAGGAGCAA GGATAAAGGC AAGGAAGCAT GTAACGTAAT      420
TGTTTGTGGA GAAACCTCAA ATCGGCTGAG GAAAAACGAC TCAGGTATGT AGTAGGGCAC      480
AGTATAAGTA GGTCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:715:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```

GAATTCGGCT TCATGGCCTA GAGATTTAAT GTTCCCTTAC CTTGCTGGAG GAACATCAAT      60
GTTGGAGGAA ACAACTTTTC TTTTITGCTC AAGGAGACAG ATGGAGCGAG TGTTTTCTTT      120
TTCATGGTCA AGGATCCGGC TGGCTTTTTT GGTGTCGTCT GTTTTCACAT CTTCTCCAT      180
GGCCAAGGAA AACACGTGTT GATGAGACAT TTTTITACCA CAGTCACGTT TTAAGTCTCT      240
TGACTGAAAT GTGAAGGTCA TTCCCGCTT AATGCTCCCC ACCTGTGAAA TGAACACAG      300
AAATTCCTAC TCACATAAAA CATCACCTTT GTACGACTAC TGCAGATGGC GGTGAGGAGA      360
GATTACAGAC ACTGTCCTTC CTGTTTCATCT GAAAGATTGT ATAATTTTAA TAAGAAAAAT      420
GCAACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:716:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```

GAATTCGGCC TTCATGGCCT AGACCTTCTG GGTGAACGAG GGCAAGCACG CCAAGTTCCG      60
CTGCTACGTG ATGGGCAAGC CCGAGCCCGA GATCGAATGG CACTGGGAGG GCCGCCCGCT      120
GCTCCCGGAC CGCCGCCGCC TCATGTACCG CGACCGCGAC GCGCGCTTCG TGCTCAAGGT      180
GCTCTACTGC CAGGCCAAGG ATCGTGGGCT CTACGTCTGC GCCGCGCGCA ACTCGGCGGG      240
CCAGACGCTC AGTGCCGTGC AGCTGCACGT GAAAGAGCCC CGCCTCCGGT TCACACGGCC      300
CCTGCAGGAC GTGGAGGGCC GTGAGCACGG GATTGCCGTG CTGGAATGTA AAGTACCCAA      360

```

CTCCCCGATC CCCACGGCCT GGTTCCTGA GGACCAGCGG CTGCTGCCCT GCCGCAAGTA 420  
CGAGCAGATC GAAGAGGGCA CTGTCCGGCG CCTCATCATC ACAGGCTCGA G 471

## (2) INFORMATION FOR SEQ ID NO:717:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

GAATTCGGCC TTCATGGCCT AGCCACTCTT AGCAACACAG ATTTTCTTCC AAATTATGCC 60  
TTGAAGCTGC TCCCGGAGCC ACCCGCTCAT CAGCACCTG CTCCTGTGGT CCTTCTCGTG 120  
AAAGGCAGAG GGGAGATGCC TGTGCCCCG AGTCTTCTCT GCAGCTGCCG TGGGAACAGG 180  
CACCTTCCCG GCTGCTGGGG ACACAGGAG GGGGAGTCAC CGTGGCTTGC TCACTTTCCA 240  
GATCAGCCAA CTGCAGAACA TTTGTTGTTG TTTAGATCCC ACGTCTGACG GTTTAGAACA 300  
GCTTTTATAA CATGGTTAAA CATGTTTACA AAGCAAGGGA GACATCTCTT ACCTTGACAA 360  
CACGAGGCTC CCACAGACCG CCTTCCCCCA GCTCGAG 397

## (2) INFORMATION FOR SEQ ID NO:718:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

GAATTCGGCC TTCATGGCCT AGAAGGAAAG AAATTTTATG TGAGAGAGCA TCTTGATATGG 60  
CAAATTCCTT TCCTAAAGTA GAATGACTAG GAAAGAGCAA AATATAGGAC AAGTCAGAAA 120  
GTCATAAGAT GGGAAAGAAA AACTTACAAC TGCTAGATCT TCTCCTGTCT AGAAGTGTG 180  
TGTGTGTGAT GCTTATATGA AGGTACTCTA ATTAATTGGA TTAAGAGAAA ATGAAACCCC 240  
ATCTCTACTA AAAATACAGA ATTAGCCGGG TGTAGTGACA CATGCCTGTA GTCGCAGCTA 300  
CTCAGCAGGC TGAGACAGGA AGATAACTTT AACCAGGAG TTGGAGGCTG CAGTGAGCCA 360  
AGATCGCGCC ACTGCACTCT AGCCTGGGAG AGACAGAGCG AGACTCCGTC TCAAAAATGA 420  
AAAAGTAGAG CCTGGTAGAG TGAAGCCACT TGCAGGAGTC GTTTAGTTAG GGCTGTGTTG 480  
CCTTACAGTG CTGGTGTCTT CACAGATGAT AATAGTAATA AAAAACACCA CAACTCGAG 539

## (2) INFORMATION FOR SEQ ID NO:719:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

GAATTCGGCC TTCATGGCCT AGGCAGTGGA TAATTGTCCT CTGGAGGAAC CATCTGTGAC 60  
ACATTCTACA TGGTTCCTTA GAGGGTCCCC AAGTGGGATT GAGTCCCTCT TGTTCCTAGC 120

```

AGTAAGCAGT TCTGTTATAC ACTCTTTATA TGCTTTTCCT CCTTTCCTCT CTCAGTCTCT 180
CTGATCCTTC CACCTGTGCT CTGGGTTTAC CTCTCAAGTA AACCACCTGC ACACAAGTCC 240
CTGTCTCAGG CTCCATTGGG GGAAACCAAA CTAAGACACC ACCTCAAAAC ACAGAATTTC 300
ACGAGGCTCC AAATGCCTCA GAAAAGTAAT GTAAATATAA AATGACCAAT TTTTGAAGT 360
ATATTAATCC TAGTTATTTA ACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:720:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 239 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

```

CCCGTGTATA GTTTGCAAAAT ATTTTCTCCT CTTCTGTAGG CTGTTTACTC TTGTTGATAG 60
TTTCTTTTGC CATGCACAAG CTTTTTGGTT TAATTAGATC CCATTGTGCA ATTTTGTCTT 120
TTGTTGCAAT TGTTTTTGGC GTCTTCATCA CGATATCTTT GCCAGTTCCT ATGTTCAAAA 180
TGGTATTACC TAGGTTGCCT TCCAGAGTTT TTATAGTTT GGGTTTTTAT TTACTCGAG 239

```

## (2) INFORMATION FOR SEQ ID NO:721:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 323 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

```

CTCGAGCACT ACCCTAGACG GTCTCATCAC TATACTGGCT CCTCCTTACC CCCGTAAATC 60
TCCCAGGTAC ACTTCCTGAT CACCCTCCGG ATACCTCATC CCTATCTATT CCTTTTATAA 120
ATAATTCCCT GCTCCTCCTT CTCACCCACA ATCCACTCGC AGTTCAAGGC CTCACTGCCA 180
TCGACTCCAC TGTCTGTGAG TGCTTCCCAA TATGCCCCAG GACCCCTCCT GGTGTACGCG 240
TCTGTATCCT GACACCCCTT GTAGACGAGT CCCGAAATTC CCGCCCCGTC CCTGGAGCTC 300
CCTAGGCCAT GAAGGCCGAA TTC

```

## (2) INFORMATION FOR SEQ ID NO:722:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

```

GAATTCGGCC TTCATGGCCT AGGCCTGTGG AGCCCCAGCT CTGGGTCCCT AGCCCCGGTC 60
CAGGCAGCCA GGCTCCCTCC TGAGCTGAGA AACGGAACCT CGCGAACCAC TGGTGGCACA 120
TCCTTCTCCT CCCCCGCCCC TGATCACCCG CCCCCGGATC AGAAATATAT CTATATTCTC 180
GACTAAAGTC TCATCAGGAA ATATTTCTTG TCTTTTATT TAAGCATCAA ATTGTTTTAG 240
TTGATTTAAA AAGGAAAAAA TACAGACGAC TCGAG

```

## (2) INFORMATION FOR SEQ ID NO:723:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

```

GAATTCGGCC TTCATGGCCT AAGAAGCAAC AATCATATTA GCTGGGGGAG GAGGATAGTT      60
TGGTATTTTT GTAGTTTGCA CAGTGACCTT TTTAAAAATC TGGTTAGGCA AAAATAGTGT      120
GATCTTGTTT GTTGCTCTAC TTCATTATGA TCACAGAATG ACCTGGTATG ATGTTAGTGT      180
TTTATGAGAG TGTATGTTT TAACAGGGGA ACACCGCAGT CAATTCCTAA CAACACTAAA      240
GTGTCAGTTC TGTTCGTGAC ACCAAGGGCT GTTTTCTTT TTCTCATATA ATGTTGAGGC      300
AACCAGGAAG ACTCGAG                                     317

```

## (2) INFORMATION FOR SEQ ID NO:724:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

```

GGCCTCAGCA GGTGTGAAGC GTGTGCTTTA GTTTCGTGGG AGGCCTGGCA TCCCCGAGAG      60
GGAGGGGAAA GGTAACCACT CCTTGTTGGA GGTGCGCCAGG GTCATTGTCG TGGATTTGCA      120
CAGTCGGCTG GCGCGTGCAA TGGCGGAAAG AAAAGGAACA GCCAAAGTGG ACTTTTTGAA      180
GAAGATTGAG AAAGAAATCC AACAGAAATG GGATACTGAG AGAGTGTTTG AGGTCAATGC      240
ATCTAATTTA GAGAAAGCAG ACTCGAG                                     267

```

## (2) INFORMATION FOR SEQ ID NO:725:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AAGTCAGTGG TAAGCCGCAG CAGTTTCCTG CCACTCGTAA      60
TATGGCAATT AAAAATTTTA AATTGTGGC TGCTTGGGGT CTGGGAGGTG ACCTGCTCCT      120
CAGCAAATTT TGACTGATAA ATTAATGCCT GGGTCTTCAG CCTGGTTCTT TGCTGGCCAG      180
TGTGACAACA GTCTGTACG TCTCTGGGGG CACATTATAA TTAACAGATG TAATCTTTCT      240
CCGGTTCAGG GTCATCTGTG AATCAGGGGT ACTGCCCCAG TAGAACTAGG AACATCCAGC      300
AAAAGACTGT TTTCAAATA TACAATTAAG TGAAAAAAGC ATGAAGAACT CGAG          354

```

## (2) INFORMATION FOR SEQ ID NO:726:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

```
GAATTCGGCC AAAGAGGCCT AGAGGTTGAC CTGAAAAACA ATGAAACACA TGAACACACT    60
TCCGATTTC TCCTCGCTGA TTAGCTTCCT GCCTGCTGTC AGTGCTGGAC GAAGTGCTAT    120
AACTACTTTA TGTAACATTA CAGAACAGCT CGAG                                154
```

(2) INFORMATION FOR SEQ ID NO:727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

```
GAATTCGGCC TTCATGGCCT AGTGGGAAGA TGTGGATGAT GAGAAGGGAG ATAGCAATGA    60
TGAATATGAC TCTGCAGGCC TATTGTCAGA TGAAGACTGT AAGTCTGTGC CCGGAAAAAC    120
TCACAGAGCT ATAGCAGATC ACTTGTTCTG GAGTGAGGAA ACAAAGAGTC GCTTCACGGA    180
GTATTCGATG ACTTCCTCAG TCATGAGGAG AAATGAACAG CTGACCCTAC ATGATGAGAG    240
GTTTGAGAAG TTTTATGAGC AATATGATGA TGATGAAATT GGAGCTCTGG ATAATGCAGA    300
ATTGGAAGGT TCTATTCAAG TAGACAGCAC GACTCGAG                                338
```

(2) INFORMATION FOR SEQ ID NO:728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

```
GAATTCGGCC TTCATGGCCT AATGAATTC TAGAACTCTC CCAGAGAAAC CAGGCAGATA    60
CTGCTCCACA CCGGTGAGCT GCTTCTCACC TGGGTAGTCT AGGGTGGTTT GCTCCAGAAT    120
TGTATTTCTG CTTTTCTTT TTTTAACTTG GCAGTGGTTA ACCATTCCCT GGAGCAGCAC    180
CAGGTAAGTC AGCTTGATC AGAGTCATCT GCTTTACCTG ACATGAGCAC ACGTTGTCTAT    240
ATATTTGCAC ATGCAGATAT CATATGTTAA ACAATATCAC ATTGTTGAAG AAAATTACAC    300
TGGAAAGCGT AAAATATAGT TTGGATGCCA TATTGAGTGT AACTTAATCC ACCCGATTCA    360
GAACTTTTGT AGAGTGCCTC GGAGTTCCTA TTTGGAAATA TCAGTTAGCA GTTTTAGTCA    420
GTAGAGACTC GAG                                433
```

(2) INFORMATION FOR SEQ ID NO:729:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AACAAGAAAC | ACCAAGTACC | TCGACCTCAA | GAATTCACAA | 60  |
| GAGATGCTCC | GCTACAAAGA | GGTCTGCTAC | TACATGCTCT | TTGCCCTGGC | TGCCTACGGG | 120 |
| TGGCCCATGT | ACCTGATGCG | GAAGCCCGCC | TGCGGCCTCT | GCCAACTGGC | TCGGTCCTGC | 180 |
| TCGTGTTGCC | TGTGTCTGTC | GAGGCCGCGG | TTGCCCCCTG | GAGTCACCAT | CGAGGAAGAC | 240 |
| AACTGCTGTG | GCTGTAATGC | CATTGCCATC | CGGCGCCACT | TCCTGGACGA | GAACATGACT | 300 |
| GCGGTGGGAC | TCGAG      |            |            |            |            | 315 |

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAGTTGTCTC | TCTGAATTAA | CTTTCTCACC | AATAGCTCCT | CTTTAAGATC | AATAACTCTT | 60  |
| ATGTTTGAC  | TTTTTAGGCT | ATTTTCTAGA | TCTTGTATGT | GTGTCTTATT | ATTTTTTATT | 120 |
| CTTTTGTCT  | CCTCTGTGAA | TTTCAAATA  | GTGCG      |            |            | 156 |

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACTTGAACCT | AGATCTCACC | CCCAGGATGT | TGCGGAGGCT | 60  |
| GCTGGAGCGG | CCTTGACGCG | TGGCCCTGCT | TGTGGGCTCC | CAGCTGGCTG | TCATGATGTA | 120 |
| CCTGTCACTG | GGGGGCTTCC | GAAGTCTCAG | TGCCCTATTT | GGCCGAGATC | AGGGACCGAC | 180 |
| ATTTGACTAT | TCTCACCTTC | GTGATGTCTA | CAGTAACCTC | GAG        |            | 223 |

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT AAATTATTGC AAAGTGTATA TTGGTTAAAA AAAAAAAGGA      60
GGAAGAGGCCA GTTTTTCATG ACGGTTAAAA GTGCAGGATT TGGAGTCCCA TGGTCCTGGG      120
TGTGAATCCT GGCTGTGGCA CTAACATATCT GTGTGACTGG CTGTGAACCT CTCGTGCCTC      180
ACTTTCTTCA TCTGCAAAAT GGGTAGTTGT ATAGCAAATG CACATAGAGA ACACCTTAACA      240
CTTTGGCACA TTGGAAGCAC TCAGTAAATG TTAATTGTTA TTATTGTTGC TCTAAAGAGA      300
ATCCTCGAG                                     309

```

## (2) INFORMATION FOR SEQ ID NO:733:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

```

GAATTCGGCC TTCATGGCCT AGATTAATTC TAGACCTGCC TCAGCTCCAC TCCTTATGGT      60
TTGCCACCAT AACCTACAAC ATTTGTCCGT CCACCCACG TGTCTTCTTC CTTTGTGGCA      120
GGAACCTCTTA TCTCTGCCTA CCAACCAATT GGTCAGGAGC ATGCACCCCTA GTGTCTCAAT      180
CTCCAGACAT TAACATCCTG CCAACAACCC AGACCATCCA GGTTCCTTTA GTGACCCCTA      240
TCTCATCCTC TTCCACATGC AGTAGGCAGG TCTAG                                     275

```

## (2) INFORMATION FOR SEQ ID NO:734:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

```

GCAGATCAGA GGCACGTTTC CCACAACTGC GAAGAGGCGC TGAGGCAATT CTGCAAGAAG      60
ATTTTGGGGT TTTGGAAAAG AAGCTATGGA AAACGGAGGG GCAGGCACTC TGCAGATAAG      120
GCAAGTCCTG CTTTCTTTTG TTTGCTGGG AATGTCTCAG GCGGGCTCTG AAAGTGGGAA      180
CTTTTGGTG ATGGAGGAAT TGCAGAGCGG GAGCTTTGTA GGAAATTTGG CAAAGACCCT      240
GGGACTCGAG                                     250

```

## (2) INFORMATION FOR SEQ ID NO:735:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

```

GAATTCGGCC TTCATGGCCT ACACAGACTG GGCAATTTAT AATGAACAGA AGTTTATTG      60
GCTCTTGGGT CCAGAGGCTA GGAAGTCCAA GAGCATGGTG TCAAGCATCA GGTGAGGATC      120
ATCACCCCGT GGTAGAAGAT GGAAGGCAGA AGTGAGCGTG TGAGACAGAG AGGGAGAATT      180
GGACTCAACT CATCCTTTTA ATCAGGAACC CACTCTGTCA GTAACGAACC CATCCCCACA      240

```

ATAATGGCAT TAATCCATTC ATGAGGCCCC TACCTCTTTT TCTCCCCCG CCCCCGAGA 300  
TGGAGTTTGG CTCTTGAGCT CGAG 324

## (2) INFORMATION FOR SEQ ID NO:736:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

GAATTCGGCC TTCATGGCCT AAACACATAC CAGATTCTTA GATTCATTTG GTGAAGGAAG 60  
CCTCTGAATT AAAACTTTTA AATATTCTG ATTTGCAACC AGACGAAAA GAAGAAAATT 120  
GACAACTTTT TTGATGCAAC TTTGTGAAAT CATGGTGTTC CTGGTTTTTC TGGTCTGGTT 180  
TTTGTGTGTT TTTTGTTTG TTTTGCCACA GTTTAGTTCC TCACCTGATC TTTCTTGTA 240  
TCCAATTGAG AGTCTCGAG 259

## (2) INFORMATION FOR SEQ ID NO:737:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

CTCGAGGCGG TGCCAGACAC GGGTCTCCTC CGACTGGGCG GTGCGTGGGA TGCCGCCAGC 60  
GTCCAGGTAC TGCGTGATGC GGATGTAGGC GATGCAGGCT GACTCGTCGC CCATCAGGTG 120  
GATGTGGGGA TTCAGGATGG TGGTGTGCAC GGGCTTGCTG TTCCGGGACC ACAGGTTTTT 180  
AAAATAGAAT CGATGGAAGT CCAGGCCCTC AACCAGGTTT CCCAGGCTC CAGGTTCCGAA 240  
GGCTGTGTCG CCAGGGTCCG ACATCTTCGT GTAGGACTCA AAATCTCCAT TGCTTATGGC 300  
TTCAATCAGC TGCTCTGTCA CTTTATAAT TTCCTGTTTC CGCACTTTGG TGTCTTCATC 360  
CTCGATGGTG GTGTTGGTGC TCTCTGAGTA GGCCATGAAG GCCGAATTC 409

## (2) INFORMATION FOR SEQ ID NO:738:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

GAATTCGGCC TTCATGGCCT ACTTCCCTC CCTTCCTTCC TTCCTTCTC CCTCCCTCCT 60  
CTCTCCTCTC TTTCTTCTT CTTGCTCTC TTCCATCCTT CCTCCCTCT CTCTCTTTCT 120  
TTCTTTCTTT CTCTCTCTCT CTCTTTCTTT CTTTCTCTCT CTCTGTCTTT CTTTCTCTCT 180  
TTCTTTCTTT CCATCTTCTT TTCTTTCTAT CTTTCTTACT TTTGATGTAG CTGTACACGAC 240  
CTAATGAAAA TACTGGCATG AGTGATGCCA CCTTTAGATT CTCCACCTTC CTGTTCCTGT 300  
CCTATTACCC AACATGAATT GGTGTTGTGC TGTAAGTACT TGGTGGGTTA TTGCTCATAG 360

ATTCAAGTGC ATTTTGTCTG AGATAGTGCT GTTACCAAAA GCAGGGGTGC TGCTTGAAGA 420  
 AGTAAACCTA ACTCTGAAAA ATAGAGACTC TCCAGAAACA CTCGAG 466

(2) INFORMATION FOR SEQ ID NO:739:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC TTCATGGCCT ACATTCTGCA AACTATTTTG TTATTAGCTT TTCACTTAA 60  
 AAATAGCCCT GCTTGCAAGC AGGCTCTGTG GTGCAATGGA TAGCGCATTG GACTTCTAGC 120  
 CTAAATCAAG AGATTCAAAA ATAGCCCTGC TAAATATTTG CAATCTTTCC TACGCTCCTT 180  
 TTTCCCCCAA AGTGACTTTG GATATCCAGA GTTACCAAAT CTAGTATTTG AAGTCCTTAG 240  
 GTTTGAGGGT TGAAAGTGAA AGGCAAGCTG TTTTAATGAA AATTCCTAAC TGAAGAGAGC 300  
 GGAGACTTAA GATGCTTAAA TTTTGGTCAC ACCTGAGCGG TATTTGTTTG CATGGCAGGA 360  
 GCTCGAG 367

(2) INFORMATION FOR SEQ ID NO:740:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

GTGATGGACA AAGACAGGGA AGGCCTCATC AGCAGGGATG AGATCACAGC CTACTTCATG 60  
 AGAGCCAGCT CAATCTATTC CAAGCTGGGC CTGGGCTTTC CTCACAACCT CCAAGAGACC 120  
 ACCTACCTGA AGCCCACTTT TTGTGACAAC TGTGCTGGAT TTCTCTGGGG AGTGATCAAA 180  
 CAAGGATATC GATGTAAAGA CTGCGGGATG AACTGTCCAA AACAAATGCAA AGATCTGGTT 240  
 GTCTTTGAGT GTAAGAAGCT CGAG 264

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

GAATTCGGCC TCATGGCCTA CACGACCAGC ACCGCCACTG CCACCTCACA GCCTTTCCTC 60  
 TTCGGGGCGC CCCAGGCCTC TGCTGCCAGC TTCACCCCGG CCATGGGCTC CATATTCCAG 120  
 TTTGGCAAAC CTCTGCCTT GCCCACAACC ACCACAGTCA CCACCTTCAG CCAGTCCCTG 180  
 CCCACTGCCG TGCCAACGGC CACCAGCAGC AGCGCTGCCG ACTTTAGTGG TTTTGGCAGC 240  
 ACCCTCGCCA CCTCGCCCC GGCCACCAGC AGCCAGCCCA TTCTGACGTT CAGTAACACG 300  
 AGCACCCCGG GCCTCGAG 318

## (2) INFORMATION FOR SEQ ID NO:742:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

```

GAATTCGGCC TTCATGGCCT AAGAAATGAA AAAGATTATT GAAACTATGC CAATGACTGA      60
GAAAGTTGAA GAATTGCTGC GTGTCATAGG TCCATTTTAT GAAATTGTCG AGGACAAAAA      120
GAGTGGCAGG AGTTCTGATA TAACCTCAGT CCGACTGGAG AAAATCTCTA AATGTTTAGA      180
AGCTGAAAGC AGTGACAGTG GAGCCGAGTC TGAGGAAGAA GAGGCCCAAG AAGAAGTGAA      240
AGGAGCAGCC CTCGAG                                     256

```

## (2) INFORMATION FOR SEQ ID NO:743:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

```

GAATTCGGCC TTCATGGCCT ATGTTTTTAT AGCACCGATG GTACTGTTTT ATTTATTGCC      60
AATAGACCAC AACATTCACA TCTGTTTTTC CTCAGGGGAA CCGTATTTGC TTTTGGTTGA      120
AGGATTTATC TATTTGATAC TATCCAGAAT ATTGTGAAGC TATAATTTC TGGGTTATAT      180
TTTAGATGGG TTGTCTGCAT GGTGGTAAAA TAAGCTTTTT CCTCTCGCCT ACGTCCCTTG      240
GAAGATCTCC TGATCATACA TAACTAGGTA GGGCTTATTC TTGCTGCCGG AGCTTGGCAC      300
CCAGCTCTAG ACTGTTTCTT TGAGCATTAC TGCAGATTGG AGACGTGTGT GAGAGGAGCA      360
GCGCTCAGAA ATAGGGCTTG AGGCTCAAGC AGAAACTGAA GCTCTCATTC AAATGAAGAT      420
GCTCTCTCTA CCGCACGATC GGCAGTGAGA AAAGGAGGAT GAAAATCCTT CTCATCACAA      480
AGAGCTTGAA GGAACCCACG TCCCAGATT AGCAACCCTA GAGTTCATCT GCTCAGGCCG      540
GGAAATGTGT AAGCTTCCTT GATCAACTCC AGGCCTCGAG                                     580

```

## (2) INFORMATION FOR SEQ ID NO:744:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

```

GAATTCGGCC TTCATGGCCT ACCCAGAGAC TCGCGGACGC TCACGATAAC CAAGGACGAC      60
CGCGAACCAG GGGCAAAATA ACATGGCAGC CAGACGAATT ACACAGGAGA CTTTGTATGC      120
TGTATTACAA GAAAAAGCCA AACGATATCA CATGGATGCC AGTGGTGAGG CTGTAAGCGA      180
AACTCTTCAG TTAAAGCTC AAGATCTCTT AAGGGCAGTC CCAAGATCCA GAGCAGAGAT      240
GTATGATGAC GTCCACAGCG ATGGCAGATA CTCCTCAGT GGATCTGTAG CTCACTCTAG      300
AGATGCCGGA AGAGAAGGCC TGAGAAGTGA CGTATTCCA GGGCCTTCCT TCAGATCAAG      360

```

CAACCCCTCT CGAG

374

## (2) INFORMATION FOR SEQ ID NO:745:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ATTGGTTTCC | CTGCTTCCAT | TCTTACTCCC | CTACACTCTG | 60  |
| TTCTCCAAAA | AATAACCAT  | GTGATCCTTT | AAAATCCTGA | CTCTCTCCTG | CTCAGAGTCA | 120 |
| TCCAGTGGCT | TCCCATATCA | CGTAAATGA  | AACCCCAATC | GTCCTTACT  | CTGGCCTGCA | 180 |
| GGGGCCTGTG | TGATGGGCCT | TCTCCAGCTT | CGTTCTTCTT | TTCCTTCTGT | TCTCCCTCT  | 240 |
| GCTTACCTAC | TCCATCTCCA | GGGCTTCTTT | CCAGCTCAAG | CCCTTTCCTG | TTGAGAGCAT | 300 |
| TTGCTTTCCC | CAGGGCACTC | GAG        |            |            |            | 323 |

## (2) INFORMATION FOR SEQ ID NO:746:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAGAACAGTG | TTACCAAAGA | AAAGGACATG | TTCAATTTCA | AACGAGCCCA | GGAGGACATC | 60  |
| TCTAGACTTC | GCAGGAAGCT | GGAGACCACA | AAGAAACCAG | ACAATGTACC | CAAGTGTGAT | 120 |
| GAGATTCTGA | TGGAAGAGAT | TAAGGATTAC | AAGGCACGCT | TGACCTGTCC | ATGCTGTAAC | 180 |
| ATGCGTAAAA | AGGATGCTGT | TCTTACTAAG | TGTTTTCATG | TCTTCTGCTT | TGAGTGTGTG | 240 |
| AAGACACGCT | ATGACACCCC | CCCCGCGCTC | GAG        |            |            | 273 |

## (2) INFORMATION FOR SEQ ID NO:747:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 666 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

|            |            |            |             |            |             |     |
|------------|------------|------------|-------------|------------|-------------|-----|
| GAAGATCTTC | GCTGTCCTCT | CTGCCTCTAT | CACACCAAAT  | ACAAGCGCAA | CATGATTGAC  | 60  |
| CACATCGTGC | TGCACCGAGA | AGAGCGTGTT | GTCCCAATTG  | AAGTTTGCCG | GTCCAAACTG  | 120 |
| TCCAAATACT | TGCAGGGAGT | AGTTTTCCGC | TGTGATAAGT  | GTACCTTCAC | CTGCTCCAGT  | 180 |
| GATGAGAGCC | TCCAGCAACA | TATAGAAAAG | CACAATGAAC  | TGAAACCTTA | CAAATGCCAG  | 240 |
| CTCTGCTACT | ATGAGACCAA | GCACACGGAG | GAACCTGGACA | GCCACCTTCG | GGATGAGCAT  | 300 |
| AAGGTAAGCC | GTAACCTTTG | GCTGGTTGGA | CGGGTTAACT  | TGGATCAGCT | GGAACAGATG  | 360 |
| AAGGAGAAAA | TGGAGAGCTC | CAGCAGCGAT | GATGAGGACA  | AGGAAGAAGA | AATGAACAGC  | 420 |
| AAGGCTGAAG | ACAGAGAGCT | GATGAGATTT | TCTGACCACG  | GGGCTGCTCT | TAACTACTGAG | 480 |

|             |            |            |             |            |             |     |
|-------------|------------|------------|-------------|------------|-------------|-----|
| AAGCGTTTTTC | CATGTGAATT | TTGTGGACGG | GCGTTTTTCAC | AGGGCTCTGA | GTGGGAAAAGA | 540 |
| CATGTGCTGA  | GACACGGCAT | GGCATTGAAT | GACACCAAGC  | AGGTGAGCAG | AGAAGAAAATC | 600 |
| CACCCAAAAG  | AGATCATGGA | GAACAGTGTT | AAAATGCCCT  | CCATAGAGGA | AAAGGAAAGT  | 660 |
| CTCGAG      |            |            |             |            |             | 666 |

## (2) INFORMATION FOR SEQ ID NO:748:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

|             |            |            |            |            |            |     |
|-------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC  | AAAGAGGCCT | AACAACCGAA | TATAGTACAC | GACCTTCCTG | CAGCAGTTCT | 60  |
| AAGCTACTGT  | CAAGTATGGA | AAATCCCAGC | AATTCTGTAC | TTGTGTTATA | CTGATGTGAT | 120 |
| GAAATTAGAC  | CTAATCACAG | TGGAAGCTTT | TAAGCCTATA | CTTTCTACCA | GAAGCTTGAA | 180 |
| GGGTTTGGTT  | AAGAATATTC | CCCAAAGCAC | TGAGATACTA | AAGAAATTGA | TGACAACNAA | 240 |
| TGAGATTCAG  | AGTAACATTT | ATACATGATC | TAAACATTG  | TTTTGTAGTG | TATATTACTT | 300 |
| GTCCATTCTT  | TTAAGGGGAG | CAGCCTGCAC | TCTTTGTAG  | ATTACTTTTG | GGGGATATAT | 360 |
| TTTGAGAAATG | ATGAAACGG  |            |            |            |            | 379 |

## (2) INFORMATION FOR SEQ ID NO:749:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

|            |             |             |            |             |             |     |
|------------|-------------|-------------|------------|-------------|-------------|-----|
| GAATTCGGCC | TTTCATGGCCT | AGGCGCAAGG  | CCGAGCGTTC | CCAGCAGGGG  | GAGAAACCCCT | 60  |
| TCACACCCCA | GGCCCTTCAG  | GAAC TG GGC | CTTGCCCTGC | AGCCACATGG  | CCCCATCCCA  | 120 |
| GTTGGGAAG  | CCAGGTGAGC  | TCTGACCCTT  | GGGCCTGGGC | CTCTGCCCCCT | CCCAACCCAG  | 180 |
| CCCTCGTCTC | CCTCGACAGC  | GCCCCTGCTG  | TCTTCCCCAC | CGCAGTCACC  | ACCACCCGAA  | 240 |
| ATGCCACGTG | GTCAGTGTGC  | ACTGCCCTGT  | TCATGTGCCT | CTGCGGGGCA  | GGGCCTTCCT  | 300 |
| GGTTTTGTTT | ACTGCTGTAC  | CCAGATAGCC  | TCGAG      |             |             | 335 |

## (2) INFORMATION FOR SEQ ID NO:750:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GCAAAGACCC | AAGAACTGAA | TATGCTCCGG | GAACAGACCA | CTGGGCTGGC | AGCTGAGTTG | 60  |
| CAGCAGCAGC | AGGCTGAGTA | CGAGGACCTT | ATGGGACAGA | AAGATGACCT | CAACTCCAG  | 120 |
| CTCCAGGAGT | CATTACGGGC | CAATAGTCGA | CTGCTGGAAC | AACTTCAAGA | AATAGGGCAG | 180 |

```

GAGAAGGAGC AGTTGACCCA GGAATTACAG GAGGCTCGGA AGAGTGCGGA GAAGCGGAAG      240
GCCATGCTGG ATGAGCTAGC AATGGAAACG CTGCAAGAGA AGTCCCAGCA CAAGGAAGAG      300
CTGGGAGCAG TTCGTCTACG GCATGAGAAG GAGGTGCTGG GGGTGCGTGC CCGCTATGAG      360
CGTGAGCTCC GAGAGCTGCA TGAAGACAAG AAGCGTCAGG AGGAGGAGCT CCGTGGGCAG      420
ATCCGGGAGG AGAAGGCCCG GACACGGGAG CTGGAGACTC TCCAGCAGAC AGTGAAGAA      480
CTTCAAGCTC AGGTACATTC CATGGATGGA GCCAAGGGCT GGTTTGAACG GCGCTTGAAG      540
GAAGCCGAGG AATCCCTGCA GCAGCAGCAG CAGGAACAAG AGGAAGCCCT CAAGCAGTGT      600
CGGGAGCAGC ACGCTGCCGA GCTGAAGGGC AAGAAGGAGG CGCTCGAG      648

```

## (2) INFORMATION FOR SEQ ID NO:751:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

```

GGAAAGAATC TAAAAGAAGA GAAGCGACCG GTGCTTTTAA GGGTGTCTAA TTTTCAAAG      60
AGACGTCTGG GAGTATTTTG CTCTGGGCGT TTGGGTGAGC AGGACCGGGG CGTTGGAGGG      120
TGCGGCGGGC TTGGGAGCAG GGAAGGTTCC GAGTCCTAGG GAGGCGGCAG CGCTCGGCTA      180
TGCCCTCTGG AGACTGGCGG GGCTGCGGGG CCGAGGGGAC CCGCGAGGGA GCCGCGCTGC      240
GGACGCGCTG AGCGCGGGAG CTCGAG      266

```

## (2) INFORMATION FOR SEQ ID NO:752:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

```

GAATTCGGCC TTCATGGCCT AGGATGTTTT AAGGCTAGGC CTGAGCGAGG AGGAGGCAGG      60
GGAGACCTGG CAGGTATTGA AGTACCTGGG AAGAAAGGCA ATGGGGATGG TGGTCCTGCT      120
CCAAGATGAT AAGTGGAGGC TGAGCGTCAC TGGTACTGGG GGCCATGATC CCCAGGGCCA      180
CCCTGGCACC AGGGTGACAG GGATGCGGGG CCTGAGCAGG AAGAACAGAG ATCTGCGGGC      240
TGCACCGACC CATCCCTGCC CTAGGCTGA AGAACGGCAT CACTCGAG      288

```

## (2) INFORMATION FOR SEQ ID NO:753:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

```

GAATTCGGCC TTCATGGCCT ACTGAATTG CTTTCTTGC CTCTCTTAG TCACCTGTCA      60
CAGGAGGTTT CTGCTCAGTA ATGATATTGT GAGTTAGGAT AATAACTTTT TTTTTTTTGT      120

```

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GCTTCAGATT | TAGAAGAAAA | GATCCTGTTT | CCATTGAAA  | GGAAGTGTAA | GCTTTTATCT | 180 |
| TTTAACCAAC | TGAACAATAC | ACCAAAAGCA | GCCTAGGGAT | GAGCATTCT  | TTGAAAGCAA | 240 |
| TTAGGTTATT | CACCTGGTAT | TAAACTATT  | TACTGTTAAA | AAATCTGTGA | CTTCATGAAG | 300 |
| TTGATTTTAA | AAGGCAGCAT | CAAAAAGTGA | AAAGGAAGGG | AAAAAATAGG | CAGCTTCTCT | 360 |
| GCACTTGTTC | GGAGCTCCCC | AAAACAGGAG | CCATGGAGAA | GTGGCATCAA | GACCGGGCTG | 420 |
| CCCTTTCGAG | AACACCCTGT | GGCAGTTCAG | AGACACGCTT | TTCTTACACT | GCATGCAGCC | 480 |
| GCTCGAG    |            |            |            |            |            | 487 |

## (2) INFORMATION FOR SEQ ID NO:754:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| GCTGGGTTTA | GGCGATCCTC | TTGCTTCAGC | CTCCCAAGAA | GCTGGAGCCA | CAGGCATGCA  | 60  |
| CCACCACGCC | CAGTTAATTT | TTGTATTTT  | TGTGGGGACG | GGGTCTCACT | TTGTGGCCCA  | 120 |
| GGCTTATCTG | GAAGTCTCTG | TTTCAGGCAG | TTCTCCTTCC | TTAACCTCCC | AAAGTGTCTGA | 180 |
| GATTATAGGT | GTGTGTGAGC | TATCACACCT | GGCTAGAAA  | ATTATAAGAA | AATATTATC   | 240 |
| ACATAATCTC | ACTACCCATT | GATGATTAA  | CATCTAGTAT | ATACATATGT | ATATATAATT  | 300 |
| TTAAAAGTAG | GGTTATATTA | TATAATTACT | TCATTATTCT | TGTTTCCAC  | TTAATATACT  | 360 |
| TAAGATATCT | TTCAAAATCA | CTAAATACAG | GAACATAGTA | TATCATCTTT | CAGTAGCCTC  | 420 |
| ATTGTATAGC | TAACCCCTC  | GAG        |            |            |             | 443 |

## (2) INFORMATION FOR SEQ ID NO:755:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

|             |            |            |            |            |            |     |
|-------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC  | TTGATGGCCT | ATTGATTTC  | TGGGCTCAGG | AGAGGATGGG | GAAGGGGCTC | 60  |
| CAGACCCCTCG | GCGGTGCACT | GTGGATGGGA | GCCCCCATGA | GCTGGAAAGC | CGTCGGGTCA | 120 |
| AACTCCAAGG  | CATTCTGGCT | GACCTGCGGG | ATGTGGATGG | GCTGCCCCCA | AAAGTGACTG | 180 |
| GCCCGCCTCC  | TGGCACACCC | CAGCCCCGGC | CACATGAAGG | TTCTTTTGGC | TTCTCCTCAG | 240 |
| ACGTCTTCAT  | CATGGACACT | ATCGGGGGCG | GGGAGGTGAG | CCTGGGGGAC | TTGGCAGATC | 300 |
| TCACCGTCAC  | CAACGACAAC | GACCTCAGCT | GCGATCTGTC | TGACAGCAAA | GATGCTTTTA | 360 |
| AGAAGACGTG  | GAACCCCAAG | TTACCCCTGC | GCTCGCACTA | CGACGGCATT | CGTCCCTGG  | 420 |
| CCTTCCACCA  | CAGCCAGTCG | GCTCTGCTCA | CCGCCTCCGA | GGACGGCACG | CTCAAGCTCT | 480 |
| GGAACCTGCA  | GAAGGCGGTC | ACGGCCAAGA | AGAATGCGGC | GCTAGATGTG | GAACCTATAC | 540 |
| ATGCTTTCCG  | GGCTCACAGG | GGCCAGTGT  | TGGCTGGACT | CGAG       |            | 584 |

## (2) INFORMATION FOR SEQ ID NO:756:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

|   |     |
|---|-----|
| GAAATTAAAA AAATAAAATC AAGTTCTTGG GTGGTGGGAA ATTGGCCTGT ATTTTTTCTT | 60  |
| CTCAGTGGAA TTTGCTGAGT AAAAAATTAT AGGCTCAAAA ACTGAGAACT TTGAAGATAT | 120 |
| TGCACCATAT TCTTTTGTGTA TTGAGTGTG CTGATGAGAA GTCTGAGGTC AGTCTGTTGC | 180 |
| TTGCTCTTTC TAGGTAAACT GTGCTTTTTA TATTTTTTCC CCTCTAGAGG TTTTGAGAAT | 240 |
| TTACTCCTTA TCCATGTTAT TCTTAAATTT CACCACATTC TCGAG                 | 285 |

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGAATGCTTT GAATCCATAT CTTTTTCAGA AACATACATG | 60  |
| GAAATACAGA ACTACACCTG TAATTACAGA GGGCATATGA ACCCTAGTTT GATAAGCCTT | 120 |
| GCTTTAAAGG ATGCAGTGTG TTCTATTAAA TGTATTTAAT ACAATTGCAG AAATGGAAAA | 180 |
| TGTGGACCTC CATTAAACAA ATTTTTTAGT TCCTAATGAG ATAAACTTGG GACCAAACCG | 240 |
| ATTCTCTTGG TTTTAGTGCT CAAAAATAGT TTCATTTTTA GGTATTTATG CTTTAGTGGC | 300 |
| CTTCTCGAG   | 310 |

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AAGAAAAGAA AGCAAGAACA GAAAACGAAG CCACAGGAAG | 60  |
| GGAAGTAGAC ATTGTATGCT TATGGTTTCT CATTATGAAG GTGCAGCTTG TAGGAGGTTT | 120 |
| GTACGGATGT GCTTTGAAGT TATGTATATT ACATATAACA GGAAAAATA TTAAATATAA  | 180 |
| CAGTGCTGGT CTCGAG   | 196 |

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACAGCAAATC | TGCCTTCACA | TGGTCTGCAT | TCTAGTGGAG | 60  |
| AAGTCAGATA | GAGGTAAGTA | CGAAGACCAC | AAAGCAGGTT | AAAAAGTAAG | GTGGGAAAGG | 120 |
| GATGCTATTT | TAGACAAGGT | GGTCAGGGCA | AGCCTCTCAG | AAGAGGGGAT | AAGTGCTCAG | 180 |
| AGACCTGACT | GAAGTGAGAG | TGAGCTATTG | ACACGGAGAA | GGGCATTTC  | GACTCTGAAG | 240 |
| AGAAAGCAGG | GGCAGGCTTT | GGAGGGAGAG | CTTGTTTATG | TAGACAAGGA | GGGGCAAAGA | 300 |
| GTCTTGTTGA | TAAAGCAGAA | TGAACAAGAG | TAAATGGGAT | TGTAAATGAA | ATGACTCGAG | 360 |

## (2) INFORMATION FOR SEQ ID NO:760:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GGACATATGC | AGTCAAAAGT | AGGTGCCCAT | ATATATAATG | AAATACCAAA | AGGACAATTT | 60  |
| AGAAGGTTGA | ATGGAAACAT | TATGGCATGC | TTTAGACGTT | CTGTTTGGT  | TTTCTTATTC | 120 |
| CCAGTCTTTG | ATCTTTTAGG | TCTATCCATT | GGTAAAGATA | TATTAGGACT | CACATCAACT | 180 |
| CAAGGTCTCG | AG         |            |            |            |            | 192 |

## (2) INFORMATION FOR SEQ ID NO:761:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGTTTATTGC | TCCCAACTAT | ACATCTTCAG | ACTTCACTTA | 60  |
| GCATGTTACG | GGTGGTTAGG | TTCCAGGATT | ATTGAGATCT | ATTTCTACTC | ACAATTGCTT | 120 |
| ATAAAATGAA | ATCTATCGTC | ACCTTAATTG | CCTGTGCCTA | AAAATATAGC | ATGCTTGCTT | 180 |
| TGTGGGAAAT | ATTGAGCCTG | GTATGTGAGT | GACTGAAATG | CAACTCCGTG | GAAACACCCC | 240 |
| AACTCCACAC | ATTCATCCCC | TTGGTAACTC | AGCACAGTCA | CAGAACTGA  | AGAAGTAAAA | 300 |
| TGATCCTCTT | TATTTGGCTT | CTCGAG     |            |            |            | 326 |

## (2) INFORMATION FOR SEQ ID NO:762:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACTGGCCCAA | GTGAACTTT  | TAACAGGCTT | TTTGAGATC  | 60  |
| TCTTTAGCTA | GATCCAAAAA | TTCATCAGGT | ATATTTTCTG | TTTTCCAAGT | TCATGCAGGC | 120 |
| AATAGCTTTG | CTAATATATA | ATACTAGTTG | CCTTGTTCAA | GCTGCCATAT | CAGTTTCATC | 180 |
| ACTCCTTTCC | CAGTGCCAC  | TCGAG      |            |            |            | 205 |

## (2) INFORMATION FOR SEQ ID NO:763:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 285 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

```

GAATTCGGCC TTCATGGCCT AAAAATGAAT ATATTCCTAT CCTATATTAA GACACTTTC      60
CTAACCTAAA AGTTTATTCT GTTTTAAAAA TAAATGAAAG TATTGTATG GGCCCTGGGC      120
CTGACGGAGA TATGCCCTGC CCCCTCTCTA GAGTGCTGGG AATTCTCAGG TGACCCAGTC      180
CCACAGGCAG CCAAGTGCCC ACACATTTC AGGCTGCCCT CCACCAGGGC AGCGACCTCG      240
GGTCACCAGG GACACGCACA CCTAGAAAGC CGTGGGCTCC TCGAG                      285

```

## (2) INFORMATION FOR SEQ ID NO:764:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 345 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

```

AATTCCTTAT CATTTAGAT ATTAAGGATT TCAGATTTTA AGAGTTATCA GTGAAACTGT      60
GTTACAAGAA TATTTGTTC CTGAGACATC TCAGTATTAT AGGTGGCTTC AGACTAACAG      120
GCACAGAATA GGATAGTGTG AAGTATCTGA TTAGCTTTAC TGTACTTGGT ACCTTTAGGA      180
CGTTCAGCCA GAGGTGATTG GAGGGATTG CACGTCTACC ACTCGTGTGT GTATCTGTGA      240
ACCATATCTC CTTAGTGCC TGCTTTTGAA CTTTATATAA ACAGAATGAT GCTGCCTGTT      300
TATCTCTATA ATTTCTTCT TTCCCTTAGC ACGTGCTCAC TCGAG                      345

```

## (2) INFORMATION FOR SEQ ID NO:765:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

```

GAATTCGGCC TTCATGGCCT AGAGAATGTT TTCATGTTAC TTATACTAAC ATTAGTTCTT      60
CTATAGGGTG ATAGATTGGT CCAATTGGGT GTATCTCGAG                      100

```

## (2) INFORMATION FOR SEQ ID NO:766:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

```

GGATTGAATT CTAGACCCTG CCTCGTCATT GTGGAACCCA TGGAGCAGTT TGATGATGAA      60
GATGGCTTGC CAGAGAAGCT GATGCAGAAA ACTCAACAAT ATCATAAGGA AAGAGAACAA      120
CCACCACGTT TTGCTCAACC TGGGACATTT GAATTTGAGT ATGCATCTCG ATGGAAGGCT      180
CTTGATGAAA TGGAAAAGCA GCAGCGTGAG CAGGTTGATA GAAACATCAG AGAAGCCAAA      240
GAGAAACTGG AGGCAGAAAT GGAAGCAGCT AGGCATGAAC ACCAATTAAT GCTAATGAGG      300
CAAGATCTAA TGAGGCGTCA AGAAGAACTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

```

GAATTCGGCC TTCATGGCCT AGATAATATT TTATGTTTAT TGTGTGTTAG ACTGTGTTGA      60
AGTGGAAACT TTGGAACATT GTTGGAAACCA GTAAGAATCC CATTCCTCAG GTATCAGGTC      120
GTTAAAGTAG TTAAATAA CGTATTCCTT AATTTTCCTC AGCAGGTTCC CCCTCCCTTT      180
AACTTGTTG TATAAATA TGTGTGTGAT GTTTTCTCTT ACAAAGATAG TACTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

```

GAATTCGGCC TTCATGGCCT AGGGATCCCA CCTTTTACAT CCTAGGTGTG AACAGATTCA      60
AATCCACTAT TCCTCCAGAT TTTATAGATG AGGAAACCAA GGTGCACAAG AGGGATTTTT      120
TTGTTTGTG TTTTGTGTTT GTTTGTTTGT GAGACAGGAT TTTGCTTTGT TGCCAGGCT      180
GGAATGCAGT GGCACAAACA TGGCTCGCTG CAGTCTCGAA CTCCTACGCT CGAG      234

```

(2) INFORMATION FOR SEQ ID NO:769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

```

GAATTCGGCC TTCATGGCCT ACGGAATGAG AAGATGAAAA ATCAAATTAA GCAGATGATG      60

```

```

GATGTCTCTC GGACACAGAC TGCAATATCG GTAGTTGAAG AGGATCTAAA GCTTTTACAG      120
CTTAAGCTAA GAGCCTCCGT GTCCACTAAA TGTAACCTGG AAGACCAGGT AAAGAAATTG      180
GAAGATGACC GCAACTCACT ACAAGCTGCC AAAGCTGGAC TGGAAGATGA ATGCAAAACC      240
TTGAGGCAGA AAGTGGAGAT TCTGAATGAG CTCTATCAGC AGAATCTCGA G                291

```

## (2) INFORMATION FOR SEQ ID NO:770:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

```

CGCTGCGTGC TTGTGAGACT GCCTGTTCTG GGACCAGCCC CTGGGCTCTT CCACCAAGAT      60
TTGGTGAGGG TCCCCCTCTG CCTCTCACAG AAGCCCCTGG CCCTGGACTG TCCTGGGGGC      120
AGGGACACCT GTGGCTGGGG AAGGGATGGC CAACAGCGGG AAGCAGTTTG CGCCTGGTGC      180
CTGATGATGG TGAACCA CGA GACAGATGGA GACGGGAGTC AGGGGACCCT GGGGACCCTT      240
CCAGGTCCAG TGACCTTTTC CCAGACAGGC ACTCTCCAGG CCTAGGACAG ACAGGGCCCC      300
AACTCCTCAT CACCCCATGA CTTGGCCTGG AGGAACCTGG GGTGGGAAAC AAGTAGTCCC      360
CCAACCTCAG AGCCAGAAC CACAGGTGGG GGACAGGGAC CTCGACAGAG CTGTGCCTGC      420
TCAACGCTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:771:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

```

GGTGTGGCTT TGCCCCGTAC GAGCGGCGCG CCATGGAGTT ACTGAAGGTC TCCAAGGACA      60
AACGGGCCCT CAAATTTATC AAGAAAAGGG TGGGGACGCA CATCCGCGCC AAGAGGAAGC      120
GGGAGGAGCT GAGCAACGTA CTGGCCGCCA TGAGGAAAGC TGCTGCCAAG AAAGACTGAG      180
CCCCCCCCCT GCCCTCTCCC TGAATAAAG AACAGCTTGA CAGAAGCCCT GGCTCTCCTG      240
CTGTCCGTGG GTGGGTGTGG GTGTGTCGGG GGCCCGCAGT CCCCTGTCTG GTGCCCCGCTC      300
TGAGCCACAC CCTCTCCGGG TGCTGCCTGG TCGTGAATCA AAAGCCGTGG CCCGCCACCC      360
CTTCCCGGGG CAGCAGGTGA GGAAGCCGCT GTACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:772:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

```

GAATTCGGCC TTCATGGCCT ACAAGAAAAA AGAAAAGAAA TCATTAACCC CAGCTGTGCC      60

```

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| AGTTGAATCT | AAACCGGATA | AACCATCGGG | AAAGTCAGGC | ATGGATGCTG | CTTTGGATGA  | 120 |
| CTTAATAGAT | ACTTTAGGAG | GACCTGAAGA | AACTGAAGAA | GAAAATACAA | CGTATACTGG  | 180 |
| ACCAGAAGTT | TCAGATCCAA | TGAGTTCAC  | CTACATAGAG | GAATTGGGTA | AAAGAGAAGT  | 240 |
| CACAATTCCT | CCAAATATA  | GGGAATATT  | GGCTAAAAAG | GAAGGGATCA | CAGGGCCTCC  | 300 |
| TGCAGACTCT | TCGAAACCCA | TAGGGCCAGA | TGATGCTATA | GACGCCTTGT | CATCTGACTT  | 360 |
| CACCTGTGGG | TCGCCTACAG | CTGCTGGAAA | GAAAACTGAA | AAAGAGGAAT | CTACAGAAGT  | 420 |
| TTTAAAAGCT | CAGTCAGCAG | GGACAGTCAG | AAGTGGTGCT | CCACCCCAAG | AGAAGAAAAAG | 480 |
| AAAGGTGGAG | AAGGATACAA | TGAGTGATCA | AGCACTCGAG |            |             | 520 |

## (2) INFORMATION FOR SEQ ID NO:773:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGTTTATTGT | TTGCATATAT | TTTATAGTGT | AGAGATTAGG | 60  |
| CATTTTAATA | AAATTTTAAA | ATTTCAGGA  | TCTTACAGAA | TGCTTTTATG | TTACAGCTTA | 120 |
| CTCCTCGAG  |            |            |            |            |            | 129 |

## (2) INFORMATION FOR SEQ ID NO:774:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACACAACGGA | AAGCTGTTTT | TCTGATCGAG | GCTCTCTGAA | 60  |
| GAGCATAATG | CAGTCCAACA | CATTAACCAA | AGATGAGGAT | GTGCAGCGGG | ACCTGGAGCA | 120 |
| CAGCCTGCAG | ATGGAAGCTT | ACGAGAGGAG | GATTCGGAGG | CTGGAACAGG | AGAAGCTGGA | 180 |
| GCTGAGCAGG | AAGCTGCAAG | AGTCCACCCA | GACCGTGCAG | TCCCTCCACG | GCTCATCTCG | 240 |
| GGCCCTCAGC | AATTCAAACC | GAGATAAAGA | AATCAAAAAG | CTAAATGAAG | AAATCGAACG | 300 |
| CTTGAAGAAT | AAAATAGCAG | ATTCAAACAG | GCTCGAG    |            |            | 337 |

## (2) INFORMATION FOR SEQ ID NO:775:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGTGAGCGCG | ACCATCATGT | CCATGCTCGT | GGTCTTTCTC | 60  |
| TTGCTGTGGG | GTGTCACTG  | GGGCCCAGTG | ACAGAAGCAG | CCATATTTTA | TGAGACGCAG | 120 |
| CCCAGCCTGT | GGGCAGAGTC | CGAATCACTG | CTGAAACCCT | TGGCCAATGT | GACGCTGACG | 180 |

TGCCAGGCC GCCTGGAGAC TCCAGACTTC CAGCTGTTCA AGAATGGGGT GGCCAGGAG 240  
CCTGTGCACC TTGACTCACC TGCCATCAAG CACCAG 276

## (2) INFORMATION FOR SEQ ID NO:776:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 586 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

GAATTCGGCC AAAGAGGCCT ATGAAATAGA AGAAGGTAAA AATAAGGAAC AAGCAATAAA 60  
CAGTTCAGAG AACATAATGG ACATCAATGA GGAACCAGGA ACAACTGAAG GTGAAGAAAT 120  
CACTGAGTCA AGTAGCACTG AAGAAATGGA GGTCAGAAGT GTGGTGGCTG ATACTGACCA 180  
AAAGGCTTTA GGAAGTGAAG TTCAGGATGC TTCTAAAGTC ACTACTCAGA TAGATAAAGA 240  
GAAAAAAGAA ATTCCAGTGT CAATTAAAAA AGAGCCTGAA GTTACTGTAG TTTCACAGCC 300  
CACTGAACCT CAGCCTGTTT TAATACCCAG TATTAATATC AACTCTGACA GTGGAGAAAA 360  
TAAAGAAGAA ATAGGTTCTT TATCAAAAAC TGAAACTATT CTGCCACCAG AATCTGAGAA 420  
TCCAAGGAA AATGATAATG ATTCAGGCAC TGTTTCCACT GCTGATACTA GCAGTATTGA 480  
CTTGAATTTA TCCATCTCTA GCTTTCTAAG TAAAACTAAA GACAGTGGAT CGATATCTTT 540  
ACAAGAAACA AGAAGACAAA AGAAAACATT GAAGAAAACA CTCGAG 586

## (2) INFORMATION FOR SEQ ID NO:777:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 463 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

GAATTCGGCC TTCATGGCCT AGTTTATATA GAGTAGGTTT ACATAGAAAA GGAAAGTTCA 60  
CTGAGATTTT TAGGTACAAG ATCTANCAAC ATGCACAAAC CAATATTGTT TATGTATAAC 120  
AGCTTCAAAC AATTAGAAAT TGTAATAACC ATTATGAAAG TGATGAAAT TGTATTGCTT 180  
AGTATTCTAC CAAAATTATT AAGTAATTTT TTTTTTTTTT TTTNANACGG AGTCCCGCCT 240  
GGGCCACAAG NGCNAAAATT TGTTCNAAA AAAAAAAGA AAAGAAAGAA AAAAAATTGA 300  
ACTCTCAATC CCTAGATGTA AAATCAACCT CGTGTTCCTG ATTTCACCAG TAATTCATAA 360  
CCACAACGTG TGTGTCTTGA ACACCTACTA TGCTTGGCAT ACTTATAATT TTTATTTTAC 420  
TTTATCCTCA AATTTAAGAT GAAGTTTCTC CTACTAACTC GAG 463

## (2) INFORMATION FOR SEQ ID NO:778:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 466 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

```

GAATTCGGCC TTCATGGCCT AGCTGGGAGT TACCTGNTAT CCTGATGGTG CCATGTGCTA      60
GCTGGGTGAC AATAACCCAG CCACCTAACA TCTCAAAGAT TGTTCCTTTT TGTGTGAAAT      120
AGGGATAGAG TTGTCTACTT CCCAGAGCCA GATAGAGAAC TTAAGAGATG AATCTGAAAA      180
TACAATAGCC TAAATAAATT CAAGGAAACA CTATTATCTT ACTGGATCTT TCCAGCAACC      240
ATGTTACTTT TGGCTGGATT TTGTATTTTC CAATTGTGTA ATGACACAAC AAAGAGCTAG      300
GTAGGTTAAG TAAATGGTTT CAGATAATAA GCCCAGTTAG CCCAGACGTT TATTTTCCAT      360
TTGCATAGAA AATGAATGTT TTATGCATAC ATTTGTTTGC CCAGGGCTAG GATATTACTT      420
GCATATGATG TTCTTATATA ATTAAAAAAA AGAATACAAC CTCGAG                        466

```

## (2) INFORMATION FOR SEQ ID NO:779:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

```

GAATTCGGCC TTCATGGCCT AATTCCACAG GGAAATGGGC AGACTGAACC AGTCCAGGTG      60
GTGAATTTTC CAAGAACATA GTTTAAGTTG ATTAAAAATG CTTTLAGAAT GCAGGAGCCT      120
ACTTCTAGCT GTATTTTGTG TATGCTTAAA TAAAAATAAA AATTCATAAC CAAAGAGAAT      180
CCCACATTAG CTTGTTAGTA ATGCTCTGAC CAAGCCGAGA TGCCCATCTC CTTAGTGATG      240
GCGGCGTTAG GGTGTGAGAG AAGGGAATTT GGCTCAACTT CAGTTGAGAG GGTGCAGTCC      300
AGACAGCTTG ACTGCTTTTA AATGACCAAA GATGACCTGT GGTAAAGCAAC CTGGGCATCT      360
TAGGAAGCAG TCCCTGGAGA AGGCATGTTC CCAGAAAGGT CTCTGGAGGG ACAAACTCAC      420
TCAGTAAAC ATAATGTATC ATGAAGAAAA CTGATTCTCT ATGACATGAA ATGAAAATTT      480
TAATGCATTG TTATAATTAC TAATGTACGC AGACTCGAG                        519

```

## (2) INFORMATION FOR SEQ ID NO:780:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

```

GAATTCGGCC TTCATGGCCT ACTAGACCCC CGCCACAGCA GCCTCTGAAG TTGACAGCA      60
AAACCATTGC TCACTACCC ATCGGTGTCC ATTTATAGAA TAATGTGGGA AGAAACAAC      120
CCGTTTATG ATTTACTCAT TATCGCCTTT TGACAGCTGT GCTGTAACAC AAGTAGATGC      180
CTGAACTTGA ATTAATCCAC ACATCAGTAA TGTATTCTAT CTCTCTTTAC ATTTTGGTCT      240
CTATACTACA TTATTAATGG GTTTGTGTGA CTGTAAAGAA TTTAGCTGTA TCAAAC TAGT      300
GCATGAATAG ATTCTCTCGA G

```

## (2) INFORMATION FOR SEQ ID NO:781:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAATGGGAAT | CATCATTGCA | TAACAAACCT | AAAGAGAAAA | 60  |
| TGAGAACATT | TACGAAGAAG | AAACAGAGTT | ACTGTACCAA | GGGCAAAAAG | AAAAGAAGGG | 120 |
| GGAAAAAAA  | TAAGTCCATA | AAAGAAAAAC | AAAAGGAATC | CATGAGCCTG | GACGACAAGC | 180 |
| CGTGGGGGAT | GTAAGAAGGT | TTGGAACCCA | AAAGGCAAGT | CTAATCAGCT | GGGGTAACAT | 240 |
| GGCGAGGCAG | TTCACATGC  | TGAGACTTGT | GGCTACCACA | TTAAAAAGA  | CTGTGCATAT | 300 |
| TCTAAATGAC | AGCAGTCCTG | CAGTGACGTG | GATATTCACT | CTAGAAGCTA | TGCAGGCAGG | 360 |
| CGTGGGAAAA | GCGAAGAGAT | GTTGCACCAT | GCAGCTGCAA | TCTTTATGTC | TCTACTGGCA | 420 |
| CAACCGAAAA | GAGTAATGTG | GAAATTATCC | AGAGAATTTA | GGTGAGAAAA | ACAGAAGCCA | 480 |
| TCAGATTTTC | TCCTTTAAAT | CTTCAGAGGG | GTATACACTC | CCCTGGAAAA | CCAAGTTGCC | 540 |
| TCTCTGCTCA | CATCCTCGAG |            |            |            |            | 560 |

## (2) INFORMATION FOR SEQ ID NO:782:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

|            |            |             |            |            |            |     |
|------------|------------|-------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGGGAGTCC  | TCATTCTGAC | CTCAAAGAAA | GGACTGTATT | 60  |
| GTCTGGCTCC | ATAATGCAGG | GGACACCAAG  | AGCAACAAC  | GAAAGCTTTG | AAGATGGCCT | 120 |
| TAAATATCCC | AAACAAATTA | AAAGGGAAAAG | TCCTCCCAT  | CGAGCATTG  | AAGGTGCCAT | 180 |
| TACCAAAGGA | AAACCATATG | ATGGCATCAC  | CACCATCAAA | GAAATGGGGC | GTTCCATTCA | 240 |
| TGAGATTCCA | AGGCAAGATA | TTTAACTCA   | GGAAAGTCGG | AAACTCCAG  | AAGTGGTCCA | 300 |
| GAGCACACGG | CGATAATTG  | AGGGTTCCAT  | TTCCAGGGC  | ACACCATAA  | AGTTTGACAA | 360 |
| CACTCAGGT  | CAATCTGCCA | TCAAACACAA  | TGTCAAATCC | TTAATCACGG | GGCCTAGCAA | 420 |
| ACTATCCCCT | GGAATGCCTC | CGCTGGAAAT  | TGTGCCAGAG | AACATAAAAG | TGGTAGAACG | 480 |
| GGGAAAATAT | GAGGATGTGA | AAGCAGGCGA  | GACCGTGCGT | TCCCGGCACA | CGTCAGTGGT | 540 |
| AAGCTCTGGC | CCCTCCGTTT | TTAGGTCCAC  | ACTGCATGAA | GCTCCCAAAG | CACAACTGAG | 600 |
| CCCTGGGATT | TATGATGACA | CCAGTGTCTC  | GAG        |            |            | 633 |

## (2) INFORMATION FOR SEQ ID NO:783:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| AAATGACACT | GAATGACACG | TTAGCCAAAA | CTAACAGAGA | ATTATTAGAT | GTGAAGAAAA | 60  |
| AATTTGAAGA | TATAAATCAG | GAATTTGTAA | AAATAAAAGA | TAAGAATGAA | ATATTAAAAA | 120 |
| GAAACCTGGA | AAACACTCAG | AACCAATAA  | AAGCTGAGTA | CATCAGCCTG | GCAGAGCACG | 180 |
| AGGCAAGAT  | GAGCTCGCTA | AGTCAGAGCA | TGAGAAAGGT | GCAGGATAGT | AATGCTGAAA | 240 |
| TCTTGGCCAA | CTACAGAAAA | GGCCAAGAAG | AGATTGTGAC | ACTGCATGCC | GAAATTAAAG | 300 |
| CCCAGAAGAA | GGAGCTCGAC | ACAATACAAG | AATGCATTAA | GGTAAATATG | GCCCCAATTG | 360 |
| TCAGCTTTGA | GGAGTGCAG  | AGAAAATTTA | AAGCAACAGA | GCTCGAG    |            | 407 |

## (2) INFORMATION FOR SEQ ID NO:784:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

```

GCAGAAAAGT CAGAACAATT TGAGGAGCTT CAAAGCATCC TTAAGAAAAG GAAACTAACT      60
TTTGAGAATA TTATGGAAAA ACTGCGAATC AAGTATCCG AAATGTACAC CATAGTCCCT      120
GCAGAGATTG AATCCCAGGT GGAAGAATGC AGAAAAGCTT TAGAAGACAT AGATGAGAAG      180
ATTAGCAATG AAGTCTTAAA AAGCTCACCA TCATATGCAA TGAGGAGAAA AATAGAAGAA      240
ATTAACAATG GGCTTCATAA TGTGAAAAG ATGTTGCAGC AGAAAAGCAA AAATATTGAG      300
AAAGCTCAAG AAATTCAAAA GAAAATGTGG GACTCACTCG AG                                     342

```

## (2) INFORMATION FOR SEQ ID NO:785:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

```

GAGATAATGG ATGAAAGGAT TCAGAGGAAA GTAGAGAAAC TAGAGCAACA ATGTCAGAAA      60
GAAGCCAAGG AATTTGCCAA GAAGGTACAA GAGCTGCAGA AAAGCAATCA GGTTCCTTC      120
CAACATTTCC AAGAACTAGA TGAGCACATT AGCTATGTAG CAACTAAAGT CTGTCACCTT      180
GGAGACCAGT TAGAGGGGGT AAACACACCC AGACAACGGG CAGTGGAGGC TCAGAAATTG      240
ATGAAATACT TTAATGAGTT TCTAGATGGA GAATTGAAAT CTGATGTTT AACAAATTCT      300
GAAAAGATAA AGGAAGCAGC AGACATCATT CAGAAGTTGC ACCTAATTGC CCAAGAGTTA      360
CCTTTTGATA GATTTTCAGA AGTTAAATCC AAAATTGCAA GTAAATACCA TGATTAGAA      420
TGCCAGCNGA TTCAGGAGTA TACCAGTGCT CTCGAG                                     456

```

## (2) INFORMATION FOR SEQ ID NO:786:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

```

GAATTCGGCC TTCATGGCCT AGGGGTGAGA GTGTAGACGG CTTTCCAGT TGTATCCAAG      60
GCAGTCAGAC AGGGGGATT TGGGCTGTGT GTGCCCCAGC GCTGCAAGGT GGCCAACAGC      120
GACGGCGGTC GGGGGACACC TGCAGTGAGA GGCTCCCCTC TCAGCACACT CGTCTCGCTT      180
CCCTCAGGCT TTGGCTGATT TGGATCTGGT TGCTGAACCT CCAACAATTC CTCAAAATCA      240
TCCACAAAGA ACTCCTTCAG TGGAGGGCGC TTGGGCTCT TCAGGGTGT CAGAAGCTGC      300
TGGATTTTGG AGGACACTCT GCTGTTTACA GGGACACCAT CTGCTGTTTC CAGCATGCTC      360
CCGCTGCACC CCCGAGGAAC ACTTCTCACA GAAGCCACCT GTGGACGCTC AAAGTACGAA      420
TGCTCCACGA GGCCCGTGGT GACATCAGGA GGGGCAGAAT GCAGATCTAT GTGGGTGTGG      480
GCCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:787:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

```

GAATTCGCCT TCATGGCCTA AGTGTCGGA ACATATGTCA TGATTCTATG TCCAAACAAC      60
AGGCCAACCC TCAGGACAGA CCCC GCCACC CCCCTTCTCT GCAGCTCCTG GCAGGGACGG      120
TGCACAGTGG TGCCGTGTGC AGGGGGCCAG CGCAGCCACT GGGCATCTGG GGCAGCGCTG      180
GTCGCCTGGC CACCTCCTTG CTGGGGCCGC TGGGCCTCCG GCCTAGAAGG ACAGGAAGCC      240
ATCCACCTCA AGGCGCAGGA AGGGGTCCAG CAGGGCCCGG AGCTTCCAGA TGGTGGCAGC      300
GCTCAGCAGG GGCAGCACCA GCCCTCGAA GGGCCTGGGG TTCACCATGT ACACGTAGGC      360
GACCAGCAGG GTGCCCAGCA GCAGCCTCAG GATCAGCAGC CTGAGAACTT CCAGCTGGAT      420
GTCCTCCATC TGGTCCCTAG ACCTGCCTCG AG                                     452

```

## (2) INFORMATION FOR SEQ ID NO:788:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

```

GAATTCGGCC TTCATGGCCT ACAGGACAGA GGCAAATAGT AGACAAAGGT GAAGCCAAAG      60
GCATAATTAA GGAAGGAAGA ACGATATTAC CAAAAGATGA AACTGAAAAG AAAGTCTTAA      120
CTGTGTCAAA TTCTCAAATT GAAACTGAAA TTGAAGTTCC ATCGTCCGCA GTTCCAGAAC      180
ACAGAAATGTA TGAAAATCAA AGTCAGGTGG TTCTTGTAGA AAACCTTCAT GTTAACAAAA      240
CAAAATGAAAC AATCAGACAT GAAAATAAAC CGTATGTTCC TAGTTCAGCA CAAATGACAA      300
GAAGGAAATT CCAAAAGGCT AAGCCAAATT TGGGAAGAGC ACACAGTAAG AAAGAGGAAC      360
CAGTTTGTAGA AAAAGTCACA AACTCGAG                                     388

```

## (2) INFORMATION FOR SEQ ID NO:789:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

```

GCCTGAAGAC ATCAAAAAGG AGGCAGCCCG GGCTTCTAGG AAGATCTGCT TTGTGTGCAA      60
GAAAAAGGGA GCTGCTATCA ACTGCCAGAA GGATCAGTGC CTCAGAAACT TCCATCTGCC      120
TTGTGGCCAA GAAAGGGGTT GCCTTTCACA ATTTTGTGGA GAGTACAAAT CATTTTGTGA      180
CAACATCGC CCAACACAGA ACATCCAACA TGGGCATGTG GGGGAGGAAA GCTGCATCTT      240
ATGTTGTGAA GACTTATCCC AACAGAGTGT TGAGAACATC CAGAGCCCGT GTTGTAGTCA      300
AGCCATCTAC CACGCAAGT GCATACAGAA ATATGCCAC ACATCAGCA AGCATTCTT      360

```

CAATGTCCA CAGTGTACA ATCGAAAAGA GTTCCTCAA GAAATGCTGA GAATGGGAAT 420  
TCATATTCCA GACAGAGATG CTGCCTGGGA ACTCGAG 457

## (2) INFORMATION FOR SEQ ID NO:790:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC TTCATGGCCT AGCGGCAGCG GCTCTTCAAA GCGGAGCCGG GAGTTTTTGC 60  
TACAGTTTTC GCCACCATGA GTCGCAGCTA TAATGATGAG CTGCAGTTCT TGGAGAAGAT 120  
CAATAAAAAC TGCTGGAGGA TCAAGAAGGG CTTCTGCCCC AACATGCAGG TTGAAGGTGT 180  
TTTCTATGTG AATGATGCTC TGGAGAAATT GATGTTTGAG GAATTAAGGA ATGCCTGTCTG 240  
AGGTGGTGGT GTTGGTGGCT TCCTGCCAGC CATGAAACAG ATTGGCAATG TGGCAGCCCT 300  
GCCTGGAATT GTTCATCGAT CTATTGGGCT TCCTGATGTC CATTCAAGGAT ATGGGTTTGC 360  
TATTGGGAAC ATGGCAGCCT TTGATATGAA TGACCCCTGAA GCAGTAGTAT CCCAGGTGG 420  
TGTCGGGTTT GACATCAACT GTGGTGTCGG CTTGCTAAGA ACCAATTTAG ATGAAAGTGA 480  
TGTCAGCCT GTGAAGGAGC AACTTGCCCA AGCTATGTTT GACCACATTC CTGTTGGGGT 540  
GGGTCAAAA GGTGTCATCC CAATGAATGA CAAAGACTCG AG 582

## (2) INFORMATION FOR SEQ ID NO:791:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

GAATTCGGCC TTCATGGCCT ACATTTTCTG AGAAAGGTTT GGATGACTGA AATATTTCTT 60  
CTACAGTCAA GGACTTTGGC ATGTGGTGGC TGAAACTGAG CTTTTTTGTG TGGGCTCCAG 120  
TTCTACTGT TCTGCAATGC TCATGGCAAG TTGAATGGTG AGCTAGCTTA TAAATTAAG 180  
AGCTCTGAAC TGTATTGAGA CCGACTGGGT ATCTAGCTTA CTGTTTAAAC ATCATTGTTG 240  
AAACCAGACC CTGTAGTCCA GTGGTGCTGC CCTGTTGTGC AAACGTCTCC TTTTCTCTGT 300  
GTTTTTGTA AGAGCTTCCA TCTGGGCTGG ACCCAGTTCT TGCACATACA AGACACCGCT 360  
GCAGTCAGCT AGGACCTTTC CGCCATGTAT TCTATTCTGT AGTAAAGCAT TTCCATCAAC 420  
AATGCCTAAT TGTATCTGTT ATTTTGGTT TAACACACAC TGCTCGAG 468

## (2) INFORMATION FOR SEQ ID NO:792:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

```

GAATTCGGCC TTCATGGCCT ACGTGGCTAT AACTGGAAAA CTGGATCCGA AATCGACCAG      60
TAAACTGGGT AGCTCGGTCT ACGCCCCGCC CACCACCCTT GCTAGCCAAT AGCCTTCACA      120
ACTCTTCTGC CACTCCCGCC CATTCCAGTG CTGTGCCGCT GCTTTTCTT CCACTCGGAT      180
CTCTTGAGCG CCCTTAGCCC GCTGTATACG CGCCCCCTCT CGGCTTCAGT AGGCAAGAGG      240
GCCATCTGCC CTTCCTTCCT GAAGGTAGAG GGGACAACAC CAGCTACGAC GGGGACTCCA      300
GAAGTCCATC TCCCGAACAG CAGCGGGGCG AAAAGAAAGA AAAAGGGTTT CCGAAGACTC      360
CTACTCACAC CCACGCTTTC CCTTAACCGG GAAGTGATTT CCGCCCCCTC TCTCCCTCTT      420
CGGTTGATAC TGGAGGAGAA GGACGGCCAG GTCTGGCCCC GCATGCCCTG GGCTTCCGGT      480
GACCTCTGGC CCTTTTCTGT CGTCCACTCT CCGCTCGAG      519

```

## (2) INFORMATION FOR SEQ ID NO:793:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

```

GAATTCGGCC AAAGAGGCCT ACAGAAACAT CCAATTCTCA AACTGAAGCT CGCACTCTCG      60
CCTCCAGCAT GAAAGTCTCT GCCGCCCTTC TGTGCCTGCT GCTCATAGCA GCCACCTTCA      120
TTCCCCAAGG GCTCGCTCAG CCAGATGCAA TCAATGCCCC AGTCACCTGC TGCTATAACT      180
TCACCAATAG GAAGATCTCA GTGCAGAGGC TCGCGAGCTA TAGAAGAATC ACCAGCAGCA      240
AGTGTCCCAA AGAAGCTGTG ATCTTCAAGA CCATTGTGGC CAAGGAGATC TGTGCTGACC      300
CCAAGCAGAA GTGGGTTCAG GATTCCATGA ACCTCGAG      338

```

## (2) INFORMATION FOR SEQ ID NO:794:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

```

GAATTCGGCC AAAGAGGCCT ACCAGGATGG TCTCAATCTC CTGACCTCAT GATCTGCCTG      60
CCTCGGCCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCCA CCGCACCCGG CCCTAAACCC      120
TAGGTTTTGA CTCTGTAAAG AAGGAAAGAT TTAACAAAC AAACAAACAT TAAATTACAA      180
CCATAATAAA CAAAAAACA CTAACTAAA TTACAACCAT AATAAAATCT CCCAAGTCC      240
GTAGGCACTG ACATATTACA GCCTTGCCAA ATCAGAATAG ATTTCTCATG TGTTGTCAAT      300
TTACCAGACA CAAAGAGTAG CTCAGATCTC ATAGACTCTT CAGATCTTGT AGACTAATTT      360
CAAGTCTTTT TAAAGTTTGG AAAAACATGT GCTATTTGGA ATTACGTCAT CCTCGAATAT      420
TAAACCTGAG CTCAAAAACC TATTGTTTGA TATTGGAAAT AGTTAACTCC AGTTTTCTTC      480
TATTAAGATA AAATTCCTTC ATCATGTCTG TGCCCTCTAA AATAATACTC CTATTGCTTT      540
GTCTTCCCCT TCTCCCCTCC TAGTCCTTCT TTAGTCATTC TATTAGAAT CAAGTCGCTC      600
ATGAGTTTAA GAATTAGAGC AGCAAGAAAT TGGGCTAGAG ATGTACAAAA GCTTTGGACA      660
ATAGTAGTTT TGCTTGTCCT CATTCTTATT AGAAGTGCTG TTAATTTACT GATAAATTCT      720
AGGACGGAAG ACAAATCTTT GCAACTGGTA CTCGAG      756

```

## (2) INFORMATION FOR SEQ ID NO:795:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACCAGGAAGC | TCTCCTGCTT | GTCATGAAGT | GAGAACAATG | 60  |
| AAAAGTCATA | GCAGATACTC | AGTTTAACTC | TGTGTAGAAC | CTATTAGTGT | TTGAGCTGTT | 120 |
| ATTCAGATTT | GAATTCAGAC | TGTGTGTTGT | TTGCTTATGG | ACACTGCCTG | TCGTTCTGTC | 180 |
| ACTGTTAAAT | TAATGAGTCT | ATAAGGTTTT | TCTTCCAGAG | GCCATAGGTG | ACATCACTAA | 240 |
| AATTGCAAGA | TAAATTGTAA | TCTTTGNTGN | TGCTGCACTC | CCCAACCTCT | CCCCACCCC  | 300 |
| CCGTGGTGTG | CTGCTTTCTA | GATGAGCGTG | TTTTGGAGCA | GGCCCATCTG | GGACACTCTA | 360 |
| TGCTTTCACC | AAGGAAGTGC | GATCTGAGCA | GCCACAATCC | AGCCAAAAGA | GGATCGTAGA | 420 |
| TATTTGCTCT | GATCAACTAG | ATGAAAATAT | AGCAGAAATG | ATTTAGCCCC | CTGCTCTGTT | 480 |
| TTATCCAAC  | GAGTCTCTGA | CCAGCAATTG | GTGCATAATT | ATTACAGCAA | AAGTTAAGAA | 540 |
| ATGAACTGT  | AGCAATTATG | TAAATGAATG | TGTTGGCCTC | TTAATACCTG | TTACTAGTGG | 600 |
| ACTTCCTGTG | AGGAAGTTAG | TTTTTGTGTT | TGATGAAATG | CTCTCGAG   |            | 648 |

(2) INFORMATION FOR SEQ ID NO:796:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 610 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AAGAGGCTGG | CCCCAGTCCC | AAGGAACAAG | AGATGGTCAA | 60  |
| GTCGCTAGAG | ACATATCAGG | GGACATTAGG | ATTGGGGAAG | ACACTTGACT | GCTAGAATCA | 120 |
| GAGGTTGGAC | ACTATACATA | AGAACAGGCT | CACATGGGAG | GCTGGAGGTG | GGTACCCAGC | 180 |
| TGCTGTGGAA | CGGGTATGGA | CAGGTCATAA | ACCTAGAGTC | AGTGTCTCTG | TGGTCCTAGC | 240 |
| CCATTTGAGC | ACCCTGCCAC | TGGAGTGGGA | CCCCTCCTAC | TCTTCTTAGC | GCCTACCCTC | 300 |
| ATACCTATCT | CCCTCCTCCC | ATCTCCTAGG | GGACTGGCGC | CAAATGGTCT | CTCCCTGCCA | 360 |
| ATTTTGATAT | CTTCTCTGGC | CTCTCCAGTC | CTGCTTACTC | CTCTATTTTT | AAAGTGCCAA | 420 |
| ACAAATCCCC | TTCTCTTTTC | TCAAAGCACA | GTAATGTGGC | ACTGAGCCCT | ACCCAGCACC | 480 |
| TCAGTGAAGG | GGGCTGCTT  | GCTCTTTATT | TTGGTCCCGG | ATCCTGGGGT | GGGGCAGAAA | 540 |
| TATTTTCTGG | GCTGGGGTAG | GAGGAAGGTT | GTTGCAGCCA | TCTACTGCTG | CTGTACCCTA | 600 |
| GAAGCTCGAG |            |            |            |            |            | 610 |

(2) INFORMATION FOR SEQ ID NO:797:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 286 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGCCACTATC | CTGGTTACTT | GTGGATTAC  | CAAGCAGTCC | 60  |
| AGCAAGTCAT | CCGTAGAAAT | GAATGTTTGA | GGAGTCGTAG | TAGTATTTGA | GGCAATCTGT | 120 |
| TCCTCAATTG | CATTTTCACT | GTTGCTCATT | ATTTGTTGTC | TCTTGGCACA | ATGCAATTTT | 180 |
| CCAAAGTGTT | CTCCATCCTT | GTCCACAAAG | TCTTTCCCAT | CACTTCCAAA | TATGCCTCCT | 240 |

CTTCTGAAG GCGGTTCTTC GGACCTCTGT GCTACAGGGA CTCGAG

286

(2) INFORMATION FOR SEQ ID NO:798:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGTTTTTAT TGGTTGGAG ACTAGAGCCA ATAGTATAAT   | 60  |
| GTTCTCAAAG GAAACAGACT TGAGTTGTTG GATTAGAGGA ACTAACCCAA CTTATATGAT | 120 |
| TTTTTTTTTG TTTTGTCTGT GTAGTTATGG CACTAGTCTC GAG                   | 163 |

(2) INFORMATION FOR SEQ ID NO:799:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGAGGGAATG CGGAGAGGGG TGGAGAAATT CCATCTTTGT | 60  |
| TAGGGCAGCA GTCAAGGATG AGTGAGTTAG CCTCTTAAGG AAGAGGCTAA GCTGTTAGAA | 120 |
| TAAAGAGGTT TACAACATCA GCGGCTTAAA TCAAATAGAA GTGTGTTTCT CTTTCACATG | 180 |
| ACAGAGTAGA TGTGGCCTGG CATCTAGAAA GCATATTTGT CTCTGCTCCA CTGTGTCTTC | 240 |
| CAGGGACCCA TTCTTCTCTT GTCTTCATGC TCCATCACTT CCTAGGGTGT TGTCTACACC | 300 |
| TGCATAGCCA TAGCTAATTT TCCATTCTCA GCACCAACCA GGGGAAGAGG AGGAAAGGTA | 360 |
| GCCTCCTTTT CATGATAGGT GTGAAGTTAT GCAGGACACT CTCAGGGTGA ATGGACCACA | 420 |
| GTGTGGCTCC TCCTGGGCTC GAG   | 443 |

(2) INFORMATION FOR SEQ ID NO:800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

|   |     |
|---|-----|
| GCATGTGCAG CGGCAAAGAG AACCCGGACA GTGATGCTGA CTTGGATGTG GATGGGGATG | 60  |
| ACACTCTGGA GTATGGGAAG CCACAATACA CAGAGGCTGA TGTCATCCCC TGCACAGGCG | 120 |
| AGGAGCCTGG TGAAGCCAAG GAGAGAGAGG CACTTCGGGG CGCAGTCCTA AATGGCGGCC | 180 |
| CTCCCAGCAC GCGCATCACA CTTGAGTTCT CTAATGGGC CAGTGATGAG ATGCCATCCA  | 240 |
| CCAGCAATGG TGAAGCAGC AAGCAGGAGG CCATGCAGAA GACCTGCAAG AACGGTCGAC  | 300 |
| TCGAG   | 305 |

(2) INFORMATION FOR SEQ ID NO:801:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

```

GAATTCGGCC AAAGAGGCCT AAACACTCAA ATTTTACATT TTGAGCAGTA TTTACGCCTG      60
AATTAATTCA CAAGTTTCAA GGTCACTAAC TTTGGTTATA TTATATTATT ATTTTCCAAT      120
TTAGCCACCT CTTTATTTGT ATAATAGAGC ATACAGCAGC ACATAAAACG CAAAACCTCA      180
GGACATAAAA AGTGGCATTG GGACGATGTT GCTCTGAAAT TTATGCATTA ATTAAACCGG      240
TATATATGTA TGCATTAATT AAACCAATAT TTATGAAGTT CCTACTGTGT TACAGACGTG      300
GATCCAGGCA CTGAGGATGC AGCAGGCCAT CCAATATAA AGTTACTTCC TTAGGAAGCT      360
TCCATTCTAA TGGGAGAGTG TTGTTAAAGA GATATATAAT AATATGTAAA ATGAATCCAT      420
AATGGTGAGT ATTATGAAGA ATAAATTGTC CAGGTTTTCT CGAG                        464

```

## (2) INFORMATION FOR SEQ ID NO:802:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 650 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

```

GAATTCGGCC AAAGAGGCCT AATCTTCTGC CTGTTCTGAA AAAGCTTTGC TTCTTGTGAT      60
TTGTATCAGC AGGGGGAAAG GTCCTTACTG TTTTCCAGA CCTACAGTTG TGATAGAGGC      120
TCCTCCACGC CCGGCCACA GACCCCAACA GTGCCCTCTC TCACAAATGG ATTCTGGGGC      180
TTGGTCTTTA TTTTGTGTTT TGTTGGGGGC AGCATATGGA ACCCAAAAAT AGTATCATAG      240
CCTAAATTG GAGCTTTGTG CCAGCCTTGT CTGTAGGATG ACCCGTGTGG GTCTCACCTG      300
GTGACTGGGA GTCCACAGGG GTCAGTTAGT AGCAGGGAGC TGCAGGGCGC CTGTCAGCAG      360
AGACCGTCTC ATTCCCCAA CCCAGGAGCC AGAGGAACTG ACGCCCGGAT AAATGCCCAA      420
GCCGCCCCGG GTGGGATTAG TCGTCTACCT TCCCAGAAAT ACACCCCTCC ATCCTGTGAC      480
TTGGATACAG TTTACTGATG AAATTAGGGA ACCTCCTGCG CCTTACCAAG AAGCTGTGGC      540
TGGAACCTAG TCAATGAAAA ATGATTGTGA AACTCTTTGG AGCTGGCTTT GAAAGAATGT      600
TTAAATGAT AGCTGATACT GCCAGACAAC AGAACAGGCC GGCCCTCGAG                    650

```

## (2) INFORMATION FOR SEQ ID NO:803:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

```

GAATTCGGCC AAAGAGGCCT AAGAGAACAG GAGCATTACA GTAAATTC TAAGTAGCCA      60
ACTGATTTCG AGTGCCAGAA ATGAATACCG ATCCACTCGA G                                101

```

## (2) INFORMATION FOR SEQ ID NO:804:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 723 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

```
GAATTCGGCC AAAGAGGCCT AGCTCTCTGT ACCCAAGGAA AGTGCAGCTG AACTCAGAC      60
AAGATTACAA TGAACCAACT CAGCTTCCTG CTGTTTCTCA TAGCGACCAC CAGAGGATGG      120
AGTACAGATG AGGCTAATAC TTACTTCAAG GAATGGACCT GTTCTTCGTC TCCATCTCTG      180
CCCAGAAGCT GCAAGGAAAT CAAAGACGAA TGTCTAGTGT CATTTGATGG CCTGTATTTT      240
CTCCGCACTG AGAATGGTGT TATCTACCAG ACCTTCTGTG ACATGACCTC TGGGGGTGGC      300
GGCTGGACCC TGGTGGCCAG CGTGCATGAG AATGACATGC GTGGGAAGTG CACGGTGGGC      360
GATCGCTGGT CCAGTCAGCA GGGCAGCAAA GCAGACTACC CAGAGGGGGA CCGCAACTGG      420
GCCAACTACA ACACCTTTGG ATCTGCAGAG GCGGCCACGA GCGATGACTA CAAGAACCCT      480
GGCTACTACG ACATCCAGGC CAAGGACCTG GGCATCTGGC ACGTGCCCAA TAAGTCCCCC      540
ATGCAGCACT GGAGAAACAG CTCCTTGCTG AGGTACCGCA CGGACACTGG CTTCTCCAG      600
ACACTGGGAC ATAATCTGTT TGGCATCTAC CAGAAATATC CAGTGAATA TGGAGAAGGA      660
AAGTGTGGA CTGACAACGG CCCGGTGATC CCTGTGGTCT ATGATTITGG CGACATCCTC      720
GAG                                                                                   723
```

(2) INFORMATION FOR SEQ ID NO:805:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 406 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

```
GAATTCGGCC TTCATGGCCT ACGGCCAAAG AGGAGGAGAT GCGCCAGTC AGGAGCGGC      60
CGTGGCCAG ACAGTGAGGA AGCGCGAAGG CGGAGCAACC GAGGAATCCT CCGGAGAAGA      120
ATCAGAGCCG TCGCTACCGC CACTACCGCC ACCACCATGG AAGGAGCAAA GCCGACATTG      180
CAGCTCGTGT ACCAGGCAGT GCAGGCGCTT ACCACGACCC AGATCCCAGC GGAAAGGAGC      240
GCGCCTCTTT TTGGCTTGGG GAGCTGCAGC GTTCGGTTCA TGCATGGGAG ATCTCAGACC      300
AGTTGTTACA GATCCGGCAG GATGTGGAGT CATGCTATTT TGCTGCACAG ACCATGAAAA      360
TGAAGATTCA GACCTCATTT TATGAGCTCC CCACAGTACT CTCGAG                                406
```

(2) INFORMATION FOR SEQ ID NO:806:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

```
GAATTCGGCC TTCATGGCCT ACGCCCGGGT TGGAAAGTGT CAGTCAATGA GCTCCGCTC      60
CTCCTGGATC CGTCTGTAGG TCTCCCGGGT GTGCATGAGC AGCTCACTCA CTGGCTTCTT      120
TAGGTGTTTC CTGAGGGGCTT CCTGCTGCTT CTTCCGCAGG GCTGTGTTAC GCTGCCAGTT      180
```

|   |     |
|---|-----|
| TTTCAGAAAG TTGTGCTGAG GAGGTGGGGC CCAGGGAGGT CTCTTCTCTT CTTTGGGGC  | 240 |
| TTTTTGCTTT GACTCTCCTT CAGCAGAGAT GAGGGTCATC AGACAGGGTG AGGTAGGTAT | 300 |
| CCGCTCAGCC AGCTGGGTCT TCCCTCGAG                                   | 329 |

## (2) INFORMATION FOR SEQ ID NO:807:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 225 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AAGGTACTTT AATCAGTCTA AATACTTGAA CATTTTATT | 60  |
| TCAGTGGTAA AAAATAGACT GAGGCAGAGT GAAGTTATAA ATTAGAATCT AAAAATTAC | 120 |
| CCTTCAACAT TAATATTTT TAGTGCTCTA ATATAAAACA CAGAAAACCT ATCTCAAATA | 180 |
| TAAAAGATGA ATATAAAATT ATTAATTAAC CAACTGGCGC TCGAG                | 225 |

## (2) INFORMATION FOR SEQ ID NO:808:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AACTTGCTCT TCTGTTTCTA GTTTTATAAA GTGAAAGCTG | 60  |
| CAATCATTGA TTAGAGACAG TTCTACGCTA AAGTCATAAT GACATTTTAT GTAATTTCTT | 120 |
| TTTTCTTTT TTTGAGACAG AGTCTCGCTC TGTGCTCAG GCTGGAGTGC AGTGGAGTGA   | 180 |
| TCTCAGCTCA CTGCAACCTC TGCTCCCGAG GTTCAAGCGA TTCTCCTGCC TCAGCCTCCC | 240 |
| GAGTAGCTGG GATTACAGGC CCCCACCAAC TCGAG                            | 275 |

## (2) INFORMATION FOR SEQ ID NO:809:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

|   |     |
|---|-----|
| GCGATTGAAT TCTAGTTGCC TACCTACCAA ACTACCTACT GAACTTTTAA ATTTGAAGAT | 60  |
| ATTCTTCCTG GACTACTTGT TTATAGTTTA TTAAATGAAC TGCTCTATTT CTAAAAACTT | 120 |
| TATTTTAA GTCCTTTCCC GTTTAGAATG CGGCATACTC TTGCTTGTGG GGTATATATC   | 180 |
| TCTGATCGTG ATAACCTCT ACCGAAAACC TTTTATGGCT CCTTGCCAAC TACAAAATTG  | 240 |
| CGATATCCTC GAG  | 253 |

## (2) INFORMATION FOR SEQ ID NO:810:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 283 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

```
GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGC CGACGCGGGG AGAGACAAAA    60
AAGAGAAAGT CTTTGAAAAG CACAAGGAGA AGAAGGATAA AGAGTCCACA GAAAAGTACA    120
AGGACAGGAA GGACAGAGCC TCAGTGGACT CCACGCAAGA TAAGAAAAAT AAACAGAAGC    180
TCCCCGAGAA GGCTGAAAAG AAGCACGCTG CCGAAGACAA GGCTAAAAGC AAACACAAAG    240
AGAAGTCGGA CAAAGAACAT TCAAGGAGA GGAAGTCCTC GAG                        283
```

(2) INFORMATION FOR SEQ ID NO:811:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 316 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

```
GAATTCGGCC AAAGAGGCCT AGGCTTCCAC CCAGGAAATG ATCCAGAGCC TCTTTTATGT    60
TATGTTTTTT GTTTGTTTCT TTCAAGACAA TCGATCAAGC CAGAGGCATT CCCCACCCTT    120
CAGCAAGACA CTTCCAGTA AGCCCAGCTG GCCTTCAGAG AAAGCAAGGC TCACCTCCAC    180
CCTGCCGGCC CTGACTGCTT TGCAGAAACC TCAAGTCCCA CCCAAACCCA AAGGCCTCCT    240
TGAGGATGAG GCTGATTATG TGGTCCCGT GGAAGATAAT GATGAAAAC TATATTCATCC    300
CACAGAAAAG CTCGAG                        316
```

(2) INFORMATION FOR SEQ ID NO:812:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 256 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

```
GGGATGCATA GATTAGTTC TGCCTCACAG GCAGGTAGCC TGAGCTCCTA GGGGGAAGTG    60
TTTTTGCTAA GTAGGGAATG AAAAGCATGT TTATTAAAGC ACAAAATTAA ATCTCTCCTA    120
TTTTTATATG ATTTCCCGTT GTTTCTTCC CTGTAGGGAA ATCTGCTGTG ATAGAGAACT    180
GCGTAACAGG CCTTTCTGT GAGCGCTCAC TCATACATTA TGCACGACGT GGCTAAGATC    240
TTTGATGGCA CTCGAG                        256
```

(2) INFORMATION FOR SEQ ID NO:813:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

```

GCAAGCGGCG CATGCAGGAG GAGAAGCAGA AGTCTGTCAA CGTCAAGAAG ACCATCCTGG      60
AGATGCGCTA CGGGGCTGAT GTGGATGCCG GCTCCATTGT GCACGCCGCC CAGAAGCTGG      120
GCGAGCCTCC CGTGCTGCCC GTATCTCGCA TGGCCTCCAT CCCCTCCATG ATCGGGGAGA      180
AGCTGCCCCAC CGCCAAGGGG TTGGAGGCCG GGCTGGACAC ACCCAAGGTA GCCACCAAG      240
GCAACTATAT CGAGGTGCGC ACAGGCGCCG GCGGGGACGG TCTGGCTCGG CCCGAGGATG      300
ACCTCCCGGA CCTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

```

GAATTCGGCC TTCATGGCCT ACGAACTCCT GACCTCAAGT GATCGGCCTG CCTCAGCCTC      60
CTAAAGTGCT GGGATAGCCA CTGTGCCAG CCTAGCCCTT CTTCAAATGT TTGGTAAAT      120
TCAGCATTGA AGCCATCAGG TCTTGGGCTT TTGCTGGGA GATTTTTTAT TATGGCATCA      180
ATCTCATTAC TTGTTACTGG CCTGTTTAGG TTTTCAGTTT TTTTCATGGT CAATCTTGGT      240
AGGTTGTTTG TGTCTAGGAA TGTATCTGTT TCTTCTAGGT TTTCCAGTTT CTTGGCGTAT      300
AGTTACTCAT AGTAGCCACT AATTATCCTT TGGATTCTG CGGTATTGGT TGTAGTGTC      360
CCATCTCGAG                                     370

```

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCAAGCCTAT CTTTGTAGTCT      60
TCCTAGAAGC ACCGTGTTCT GTGGAAGTCA GCATCAGCAG CTTTGCTGAG GACTCCCCCA      120
TCTTCCTTTC CTTCCCCGGA AAGCACAGAC CTAAGTGAGT CTTCACTGGA TCCCAGCTAA      180
CAGCTTCTGC CCATTCTAT CTTTCCACAG AGCCAGTGGC AGCCCCAGCT GCAGCAGCTA      240
CGTGACATGG GCATCCAGGA CGATGAGCTG AGCCTGCGGG CCCTGCAAGC CACCGGTGGG      300
GACATCCAAG CAGCCCTGGA GTCATCTTT GCTGGAGGAG CCCCATGAAC TCCCTGCTTC      360
CCCTGAACCC CCAGCACTCG AG                                     382

```

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

|  |     |
|--|-----|
| GCCACGGTGC TCATTCAGAC TACCCGTGTG CCCAAGCAGG TGGCAGTACC CGCGACAGAC  | 60  |
| ACCACTGACA AGATGCAGAC CAGCCTGGAT GAAGTCATGA AGACCACCAA GATCATCATT  | 120 |
| GGCTGCTTTG TGGCAGTGAC TCTGCTAGCT GCCGCCATGT TGATTGTCTT CTATAAACTT  | 180 |
| CGTAAGCGGC ACCAGCAGCG GAGTACAGTC ACAGCCGCCC GGA CTGTTGA GATAATCCAG | 240 |
| GTGGACGAAG ACATCCCAGC TGCAACATCT CGAG                              | 274 |

(2) INFORMATION FOR SEQ ID NO:817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AAAAAATAC ACCTGTGGTC CCAGCTGCTC GGGAGGCTGA  | 60  |
| NTTACGAGAG TCCCTTGAAC CTGGGAGGCG GAGGTTGCAG TGAGCTGAAA TCATGCCACT | 120 |
| GCACTCCAGC CTGGGCAACA GAGCGAGACT CTGTTNAAAA AAAAAAAT AGCGAGAGAT   | 180 |
| CGAGAGAGAG TGCACGTGAG AAGACTAGTA GTTGCTATGG ACTGGGGGAG AAGGAACGGG | 240 |
| TTACAGGGTT TCTTTTGGGG ATAACGAAAA TGTCTAAAA CTGGACTGTG GTGATAACTG  | 300 |
| CACAACTCTG TGAATGTACT AAAAATACT GAACTGGCCG GGCGCGGCAG CTCGAG      | 356 |

(2) INFORMATION FOR SEQ ID NO:818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGGCAGGGTG TCAACTATT TAATTCTAAA AATAGTATAT  | 60  |
| TCATAGAGAT ACTATCATCC TCATTTTATA TATTCAAAAA ATTCAAAGAA GTTAAGTAAA | 120 |
| TTGCCAAAAG TCACCCAGAT AATAAGTAGA AAAGATGGTA ATGAAATCCA GTTTGGCCTT | 180 |
| CGAG  | 184 |

(2) INFORMATION FOR SEQ ID NO:819:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

```

GAATTCGGCC TTCATGGCCT ACAACAACAA CAACAAAAAA ACATCATCCG GGGAAAGCTTT      60
TCAATATCCT GACGTTGGGT CTCTCCAGTG TAGATGGAAA TATGGAATTG GGAATAGACA      120
TCGATATTTT TGGAGGTCCC CAGGGGTTAC CAATGTGCAG ACAGGTTTGG GAACCACTGC      180
ATTAGGCATT TTACATTTAT TTAGGGCTTT CACTGGATTT GTCACCCCAT ACTTTCATAA      240
TCCATTTTTT CTGATTTTTT TTCTGGTTTT TGGTGAGGGT ATAGTTGGGA TGGGGTTTTT      300
TTTTTGTCC TCCCACCGCT CGCCCCATC CAGTGTGGAC GTACTCGAG      349

```

## (2) INFORMATION FOR SEQ ID NO:820:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 167 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

```

GAATTCGGCC TTCATGGCCT ACTCTTTCCT TGAAGAATTT GTTGAAGACT TCAGAAGTGA      60
TGCTGGCTGC TTTCTTCATT AGGTTGAGCT CCCCATCCTC CTTTACAGCG ATGGTATATG      120
CCACAAGTGC ACTGATATCT ATTTTGTCAA AGCCTTCAGG TCTCGAG      167

```

## (2) INFORMATION FOR SEQ ID NO:821:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 733 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```

GAATTCGGCC AAAGAGGCCT AGCGAAATAA AACAAGGGAG TCAGCAAAC CAGAAATTTT      60
AGCAATGTCA GCTCATGACA AGGCTGCATT ATCAGAAGAG GAACTGGAGA GGAAGTCGAA      120
ATCTATCATT GATGAATTTT TACACATTAA TGATTTTAAAG GAAGCCATGC AGTGTGTGGA      180
AGAGCTGAAT GCCCAGGGCC TACTACATGT TTTTGTGAGA GTGGGAGTGG AGTCCACCCT      240
GGAAAGGAGC CAGATCACCA GGGATCACAT GGGCCAACTA CTCTATCAGC TGGTACAGTC      300
AGAAAACTC AGCAAACAGG ACTTTTTCAA AGGTTTTTCA GAAACTTTGG AATTGGCAGA      360
TGACATGGCC ATTGATATTC CCCATATTTG GTTGTACCTT GCTGAACTGG TGACCCCAT      420
GTTAAAGAA GGTGGAATCT CCATGAGAGA ACTTACCATA GAATTTAGCA AACCTTTACT      480
TCCTGTTGGA AGAGCTGGGG TCTTGCTATC TGAAATATTG CACCTACTAT GCAAACAAAT      540
GAGCCATAAG AAAGTGGGAG CCTTATGGAG GGAGGCTGAC CTCAGCTGGA AGGACTTTTT      600
ACCAGAAGGA GAAGATGTAC ATAATTTCT TTTGGAGCAG AAGTTGGACT TCATAGAGTC      660
TGACAGTCCC TGTTCTCTG AAGCACTTTC AAAGAAAGAA CTGTCTGCCG AAGAGCTGTA      720
TAAGCGACTC GAG      733

```

## (2) INFORMATION FOR SEQ ID NO:822:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 512 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| TGCCAGATAG | TTCTGCAGAA | GAAATCACTG | TTTGTCTCTG | GACACAGGTA | AGTTCCTCTG | 60  |
| AAACTTTTGA | CCTTGAAAGA | GAAGTCTCTC | CAGGTAGCAG | AGATATCTTG | GATGGAGTCA | 120 |
| GAATAATAAT | GGCAGATAAG | GAGGTTGGTA | ACAAGGAAGA | TGCTGAGAAG | GAAGTAGCTA | 180 |
| TTTCTACCTT | CTCATCCAGT | AACCAGGTAT | CCTGCCCCTG | ATGTGACCAA | TGCTTTCCAC | 240 |
| CCACAAAGAT | TGAACGACAT | GCCATGTACT | GCAATGGTCT | GATGGAGGAA | GATACAGTAT | 300 |
| TGACTCGGAG | ACAAAAGAG  | GCCAAGACCA | AGAGTGACAG | TGGGACAGCT | GCCCAGACTT | 360 |
| CTCTAGACAT | TGACAAGAAT | GAGAAGTGTT | ACCTCTGTAA | ATCCCTGGTC | CCATTAGAG  | 420 |
| AGTATCAGTG | TCATGTGGAC | TCCTGTCTCC | AGCTTGCAAA | GGCTGACCAA | GGAGATGGAC | 480 |
| CTGAAGGGAG | TGGAAGAGCA | CGTTCGCTCG | AG         |            |            | 512 |

## (2) INFORMATION FOR SEQ ID NO:823:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

|            |             |            |            |            |             |     |
|------------|-------------|------------|------------|------------|-------------|-----|
| GAATTCGGGC | CTTCATGGCC  | TACTCTCATC | TGTATCTGTT | TCCTCTAACT | TTACTGAAAA  | 60  |
| GATAGAATTC | ATTAAGCATG  | AATTCTACCA | TCTTCTCCCT | ACTACAGCTC | TGTCAAAAAG  | 120 |
| ATGTTGCTCT | CTGAGCCCAA  | CTCTCCCTCA | GTCCCCAGGA | TTCTGTCCCT | GTCCACCTTT  | 180 |
| AATCTTTTCC | TTTCCTGATT  | TTATGTTATA | AGTTATTTAG | ATTTCGATGA | GAGATAATCG  | 240 |
| TACCTAGAGT | ATGGGAGAAC  | TATTTAAGGT | TTACAGGTTG | GGTGAACCC  | TTGTATATAC  | 300 |
| TAGATGGTAC | TGTGAGGCT   | TGCCCACTG  | TCAGCCTTCA | TCTGAACAGA | GCAGAAAGTG  | 360 |
| TTTCTGCATG | TTCAACCAAGC | CCTGCTGGAC | TGTATCACTT | TTCTCTGTGG | GCCAAAACCTC | 420 |
| GAG        |             |            |            |            |             | 423 |

## (2) INFORMATION FOR SEQ ID NO:824:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

|            |            |            |             |            |            |     |
|------------|------------|------------|-------------|------------|------------|-----|
| GAATTCGGCC | TTTATGGCCT | AGCGGCCTCA | GATGAATGCG  | GCTGTTAAGA | CCTGCAATAA | 60  |
| TCCAGAATGG | CTACTCTGAT | CTATGTTGAT | AAGGAAAATG  | GAGAACCAGG | CACCCGTGTG | 120 |
| GTGCTAAGG  | ATGGGCTGAA | GCTGGGGTCT | GGACCTTCAA  | TCAAAGCCTT | AGATGGGAGA | 180 |
| TCTCAAGTTT | CAACACCACG | TTTTGGCAAA | ACGTTTCGATG | CCCCACCAGC | CTTACCTAAA | 240 |
| GCTACTAGAA | AGGCTTTGGG | AACTGTCAAC | AGAGCTACAG  | AAAAGTCTGT | AAAGACCAAG | 300 |
| GGACCCCTCA | AACAAAACA  | GCCAAGCTTT | TCTGCCAAAA  | AGATGATCTC | GAG        | 353 |

## (2) INFORMATION FOR SEQ ID NO:825:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGGAGTAAGG | ATGCAGAAAT | GATTGCAGCA | TATTTTCATTC | 60  |
| TCTACGCAAG | GATGTTCCCT | GGAAATGGAG | GCGACATTGC | TGCCTGCTTT | TTTGAGGGAA  | 120 |
| TTGATGATGT | TCACGTGAAG | GAAAATGGGA | CATTAGTTCA | AGTAGCAACT | ATATCAGGAA  | 180 |
| ACATGTTCAA | CCAAATGGCA | AAGTGGGTGA | AACAGGACAA | TGAAACAGGA | ATTTATTATG  | 240 |
| AGACATGGAA | TGTAAAAGCC | AGCCCAGAAA | AGGGGGCAGA | GACATGGTTT | GATTCCTACG  | 300 |
| ACTGTTCCAA | ATTTGTGTTA | AGGACCTTTA | ACAAGTTGGC | TGAATTTGGA | GCAGAGTTCA  | 360 |
| AGAACATAGA | AACCAACTAT | ACAAGAATAT | TTCTTTACAG | TGGAGAACCT | ACTTATCTGG  | 420 |
| GAAATGAAAC | ATCTGTTTTT | GGGCCAACAG | GAAACAAGAC | TCTTGGTTTA | GCCATAAAAA  | 480 |
| GATTTTATTA | CCCCTTCAAC | CTCGAG     |            |            |             | 506 |

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GATGGAGCAG | TTCCAGAAGG | AGAAGGAGGA | ACTGGACAGG | GGCTGCCGCG | AGTGCAAGCG | 60  |
| CAAGGTGGCC | GAGTGCCAGA | GGAAACTGAA | GGAGCTGGAG | GTGGCCGAGG | GCGGCAGGCG | 120 |
| AGAGCTGGAG | CGCCTGCAGG | CCGAGGCACA | GCAGCTGCGC | AAGGAGGAGC | GGAGCTGGGA | 180 |
| GCAGAAGCTG | GAGGAGATGC | GCAAGAAGGA | GAAGAGCATG | CCCTGGAACG | TGGACACGCT | 240 |
| CAGCAAAGAC | GGCTTCAGCA | AGAGCATGGT | AAATACCAAG | CCCGAGAAGA | CGGAGGAGGA | 300 |
| CTCAGAGGAG | GTGAGGGAGC | AGAAACACAA | GCTCGAG    |            |            | 337 |

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACAGGTACAG | AATCATATGA | ATGTTTCTTT | CTTCTTTTCT | 60  |
| TTTCTTTCTT | TCTTTCCTTC | TTTCTTTCTT | TCITTTTTTG | AGACAGAGTC | TTGTTCTGTT | 120 |
| GCCAGACTGG | AGTGCACTGA | CTCAATCTCA | GCTCACTGCA | ACCTCCACCT | CCCAGGTTCA | 180 |
| AGCAATTGTC | CTCCTCAGC  | GAGGACCTGC | CTCGAG     |            |            | 216 |

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

```

GAATTCGGCC AAAGAGGCCT AAAAAAAGA AGATGGGTTT TTTAAGTCCA ATATATGTTA      60
TTTTCTTCTT TTTTGGAGTC AAAGTACATT GCCAATATGA AACTTATCAG TGGGATGAAG      120
ACTATGACCA AGAGCCAGAT GATGATTACC AAACAGGATT CCCATTTCGT CAAAATGTAG      180
ACTACGGAGT TCCTTTTCAT CAGTATACTT TAGGCTGTGT CAGTGAATGC TTCTGTCCAA      240
CTAACTTTCC ATCATCAATG TACTGTGATA ATCGCAAACT CAAGACTATC CCAAATATTC      300
CGATGCACAT TCAGCAACTC TACCTTCAGT TCAATGAAAT TGAGGCTGTG ACTGCAAATT      360
CATTTCATCA TGCAACTCAT CTCGAG                                     386

```

## (2) INFORMATION FOR SEQ ID NO:829:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

```

GAATTCGGCC AAAGAGGCCT AGCTGAATCC TAGATTTCAG CTCTCACTC AGAATTTAAG      60
CTGTTTTTCTG TACCAGAAAT ATTTAAGACT GTTAGTTTAA CTTCTAAGAA TAGCAGATAA      120
AGCGTATAGG TGTTTTGAGA TAACCGTATT CATAGGAAAA ACAACATAA AACTTTCATA      180
ATTTTGGGAA GAGTTACACA CAAAATATC ATCATTGAAT AATTAGTACA ACAAAAATGC      240
ATTGTTTGTG CCTAAAGGTT GAAATGAACA GAATCATGAT GGGAACTACT GAG                293

```

## (2) INFORMATION FOR SEQ ID NO:830:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TATGTCCTAT TCCCTGTGTC      60
CTGCAAGACC CCCTTGGTT TGGTTTTCTT TTCTTTCTT TTTTCTTTT TTGAGACTGC      120
GTCTTGCTCT GTCTCCAGG CTCGAG                                     146

```

## (2) INFORMATION FOR SEQ ID NO:831:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

```

GCGATTGAAT TCTAGACCTG CCTCTCATCC ACTATTGTCT TTCCCAATT TTTTCTAGC      60
CTTATCTTCC AGAATTCCTC TCAGACATAG GTGGCCCTGG TTGCTTGATC CTGTCTCTAA      120

```

GTTGGTCTTT CATGTTTTCT CTCCTCAGAT TGCTCGAG

158

(2) INFORMATION FOR SEQ ID NO:832:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

|             |            |             |            |            |             |     |
|-------------|------------|-------------|------------|------------|-------------|-----|
| GAATTCGGCC  | TTCATGGCCT | AGCTGATTTA  | AATCTAAAAA | CTGGATAAGA | AGCTGTGGCT  | 60  |
| TGTAATTAAA  | AATAGACCTT | TATTCACCTAG | ACCTACAGTT | TGCTTTTTTC | ATATGTTAAG  | 120 |
| AAAAGTTTAA  | TATCCTGCT  | CTCTATTTC   | GTTCTAGGGG | CACCACTATC | AGTTAACCCCT | 180 |
| AAAGATTCT   | GTGGGTGAAA | CCATTTTGAT  | TACCATCTTG | CTCTGCTGCC | AGTTATGGTA  | 240 |
| ACCAAACCTCT | CTTTGTTTCT | GGATGCTAAA  | TCTGTCCACT | TGTGCCTTAA | CTACATCCTA  | 300 |
| ACTCCCGTCA  | ACTCGAG    |             |            |            |             | 317 |

(2) INFORMATION FOR SEQ ID NO:833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

|            |            |            |             |            |            |     |
|------------|------------|------------|-------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGCCCCCGGA | GCCCACCACA  | GTCCCCAGAG | TGTGATAAAA | 60  |
| ACAATTTT   | TACTTCTTAT | CTCTTCTAG  | TAGTCTACAT  | CCCATTCCCA | GTCTTTCCAA | 120 |
| TCATAAAAT  | TTGTAGTTA  | TTTAGTTCAC | ACTTGAACGT  | CCTATGAAAC | TGTTTTAAAC | 180 |
| CTTTTACCTA | TCTTGTTTCT | TGTCATTATT | CTTAAGCCAT  | TGATACAGAA | ATCAGAACCA | 240 |
| AATTTAATAT | TGTTGTGGGT | ATGAGACAGT | TTCTGTCTATG | TTTTAATTTT | TTCCTTAAAG | 300 |
| TTTTACTATG | TACTTCATAT | ATACCGGGCA | CTTCTCGAG   |            |            | 339 |

(2) INFORMATION FOR SEQ ID NO:834:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TCATGGCCTA | TGACTTTTAA | GTTTCTTATT | ACACTGAGAA | ACACCTAACT | 60  |
| ATCCTAATAG | AATTAAATTT | CCCTAAGTTA | TAAGACACTT | GAATTTTTTA | AAAAGAGATA | 120 |
| ATTAAATTTT | TCCTATATTT | TATTTTATTT | ATTTTTCAG  | TCATGCTCCT | TCTGTATCTC | 180 |
| CTATATTTTA | TTATATTACT | TACATGGCTT | TATTTTACA  | ATAACTCTTT | TTTCCCTTC  | 240 |
| TTTTATTAT  | TTGTTTATTT | TTGGAAACAG | AGTTTCCTTA | TGCTGCCAC  | GCTGGTCCTG | 300 |
| AGCTCAAGCA | ATCTTCACGC | CTCAGCCTCC | CAAAATTATA | GGACTACAGG | CATGAGCCAC | 360 |
| TGTGCTTGGC | CTAAGCCACT | GCACCGGGCG | CTCGAG     |            |            | 396 |

## (2) INFORMATION FOR SEQ ID NO:835:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

```

GAATTCGGCC TTCATGGCCT ACTTTTACTC ATGCATAATT TTGTAAATC CTACATTGGT      60
CATTTCGAAA ATATTGATTC ACTGAGTAAT ACAACTCTTC CAAATGTTGA ATGTTTCATT      120
CTACAATATC AGAAACTCAA TTTGTTAATG TTTACTACTAG TCTCATCAGA AATGTCCTTA      180
AGTATTGTTT AACTGGCAAA CTCATAGTGA CGACTACAGG CTTTCCAGAA TTTTCATTTT      240
CATTGAAGT CTGAATTTTA TCAACTATAA ATACTGTCAG TTGTTTCCTT CGAG          294

```

## (2) INFORMATION FOR SEQ ID NO:836:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

```

GAATTCGGCC TTCATGGCCT ACTCTGATAC TAACTGTAGT CTACATTAT ACATTGTGTC      60
TGAATGCTGG TTTGTGGCT TCACTAGCTC CCTTTTCTC TCTCCTTTT TATCCTGTCT      120
TTTGCTGCTG CTTTCCACCT TCTGTCCAGC TCCATCTTCA GACAGCTCCC TGTATAACGC      180
TCCACTTCCT GAGTATTCCA GTTGCCAGCC TCCTTCAGCA CCTCCTCCAT CATACGCTAA      240
AGTCATCTCA GCTCCAGTGT CAGATGCCAC TCCTGATTAT GCTGTAGTGA CTGCTTTGCC      300
ACCTACTTCC ACACCCCTTA CACCACCACT GCGACACCCA GCGACACTCG AG          352

```

## (2) INFORMATION FOR SEQ ID NO:837:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

```

GAATTCGGCC TTCATGGCCT ACCGGACCTT GAAAATGGAA TGTTCAGAAA CACATGTGCA      60
AGGGAGCTGT GCCAAGCTCA TGTTGCGAAC AGGCCTCCTG ATGAAGCTTC TCAGCGAGCA      120
GCAGGAAGCA AAGGCATTGA ATGTAGAATG GGATACGGAC CAACAAAAAA CAAATTATAT      180
TAATGAGAAC ATGGAACAGA ATGAACAGAA AGAGCAGAAG TCAAGTGAGC TCATGAAAGA      240
AGTTCAGGA GATGACTATA AGAACAACT CATCTTCGCA ATATCTGTGA CTGTAATACT      300
AATAATTTG ATTATAATTT TTTGTCTTAT AGAGGTGAAT TCACATATGC TCGAG          355

```

## (2) INFORMATION FOR SEQ ID NO:838:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

```
GAATTCGGCC TTCATGGCCT AAAAAATCTA GTTGAGAAAA AGAAAGAAAC CAAGAAGGCT      60
AATCACAAAGG GTTCTGAAAA TAAAACTGAT TTAGATAATT CTATAGGAAT TAAAAAATG      120
AAAACCTCAT GTAAATTAA GATAGATTCA AACATAAGTC CGAAGAAGGA TAGCAAAGAA      180
TTTACACAAA AAAATAAGAA AGAGAAAAAA AACATTGTTC AACATACTAC AGACTCTTCT      240
CTCGAAGAAA AACAAAGGAC ATTAGACTCA GGCACCTCTG AAATTGTGAA ATCTCCCAGA      300
ATCGAGTGTT CTAAGACAAG AAGAGAAATG CAATCAGTGG TTCAACTCAT AATGACAAGA      360
GACAGTGATG GTTATGAAAA CTCAACAGAT GGTGAAATGT GTGACAAAGA TGCTCTGGAG      420
GAAGATTCAG AAAGCGTTAG TGAATAGGA AGTGATGAGG AATCTGAAAA TGAAATTACA      480
AGTGTGGTA GAGCTTCAGG TGATGACGAT GGAAGTGAAG ATGATGAAGA GAAGCTCGAG      540
```

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

```
GAATTCGGCC TTCATGGCCT AGCATTTCAT CTCTAAATTG GGGAGAATAG AAGCATCTAC      60
TTCATGTAGT AGCCAGGATT AGAAGAGGGA GGAATAACTG GGCCCTGGAT AGAATGTGAT      120
GAATGTATAT TCTTAATGAG AAGTGGAAAT AATTGTGGT TGAGAGCTGT GCCTCAGATC      180
AGAGTGACAG GATACATGGC TAGGCTATAT TTTCCAGCAG ATTAAGAGCT GCAGCCCAAG      240
ACTCTGAAAT ATGAAGAAAA AAGGAGAAGA TGACAGCATA TCTTTTAA GAAATATTTT      300
CCAGCCAAAT GGTGCAGCAG AGGACTTCCA GGAATTTGTT CTTGTCTGT ATCAAAGGTG      360
AAGAGTTCGT AGCCTTCAAG GAAACAAGAA ACCATGGGAT GGAGTGAAGG AAGGTGGCCT      420
GGAACCACT GCTGAGCCTC TCTGAGCCCC AGTTTCTCG TCTCTAAAAT GGGGCTGATC      480
TCCTCTCCCT CAGACTGTTG TTGCAGGAAT TAAACAGGT GTTGAGTGGG CTGCTCGAG      539
```

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

```
TTCCACAGCT CTGATATTCA GTAACCCATG TGGAGAACAA AAGGATTTT CTCCATGAAG      60
TCTAATTGCC TGCTGAATAA ATAAATAAAT AGATGAAGCA CTGCATGCAT TAAATGAAAG      120
TAAATATTGA CCCTGCCACC ATATGTTTGC TGGGGTGCTG GCTGAAGTGT GCTGGCAGGT      180
CCAATCAGTC AGAGTCTGCG AGCCCAAGCA GCAGGAGAGA CAGGAATATC AAAAAGGCGC      240
TCCTGCTTGT GCCTTAATCT TTGTCCAACC CCCAATTCCT CCACCACAGG CCTCGAG      297
```

## (2) INFORMATION FOR SEQ ID NO:841:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

```

GAATTCGGCC TTCATGGCCT ACCTTATTAG TGATTGGCGA TTCAGGCCAT GTCATAGGGC      60
CTTTCAGACA AAAGGTTCTT ATCCCAGTCA GCTGGCCAAA ACATTAACCT TGGATTCTCT      120
ACCCCTGCTAC AGCATCTTCT AGAAAGGCAG CAAGATAATA TTGTGGCAGT GCACAGATAA      180
CATCAGGGTA GACTTGACTG GAGAAAACCA AATTCTGCGC TGCTCCTGT GTGCCCCCAT      240
CCAGCTGTGC ATGCACACAC AGGACACCTT TCTAGTATGA AGAACTTGCA TCATGTCTGC      300
CCTCTATTGA GCACCCCTT CTAGAAATAC TTCCAAGTAT TAGCATGTGA ACTGTTGACT      360
CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:842:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTG ACTTATGAAT TCTTTCTGTG TGATCGTAAA      60
AGTGCAGAGT TTATTGCAAA GAGAATCTTC ATCTGAATCC TCAGCCTGGG AATCTTCCTC      120
TTCCACCGCC AACTCCTCCA CCCAGTCTGA GTCTACTTCA ATGGCCCGCT CTCCCCCATC      180
CGCACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:843:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

```

GAATTCGGGC TTCATGGCCT AAGCTCCGCG AGCCCCCTAC AACTCGTTTC CTTCCGTTCA      60
CCTTCGCAGG GCGGCGACTG GCGGCGCGAT GGACCTGACC GGGCTCCTGC TGGACGAAGA      120
AGGCACCTTC TCCCTCGCCG GCTTCCAGGA CTTACAGTTC CTCCCAGGAC ACCAGAAGCT      180
GAGTGCCCGG ATCCGAAGGA GGCTCTACTA TGGCTGGGAT TGGGAAGCCG ACTGTAGCCT      240
GGAGGAGCTC TCCAGCCCGG TGGCAGACAT TGCTGTGCGA CTGCTCCAGA AGGCAGCCCC      300
CAGCCCTATT CGCCGACTCC AGAAGAAATA CGTAGCTCAT GTGTCCCGGG AGGCATGCAT      360
CTCCCATGTG GCTATGATGC TGGCTCTGGT GTACATTGAA CGGCTCCGGC ACCGAAACCC      420
AGACTACTTG CAGCATGTGT CATCCTCTGA CTTGTTCTTC ATCTCCATGA TGGTGGCCAG      480
TAAGTACCTC TATGATGAAG GGGAGGAGGA GGAGGTCTTC AACGACGAAT GGGGAGCTGC      540
TGGGGGTGTG GCCGTGCCCA CTCTCAATGC CTTGGAGAGG GGCTTCCTGA GTGCCATGGA      600

```

TTGGCATCTC TACTACTGAAC GCTCGAG

627

## (2) INFORMATION FOR SEQ ID NO:844:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACCTGAGCTG | CCGAAGCCGC | CGTCCTGCTC | TCCGCGTGG  | 60  |
| GCTTCTCTAA | TTCCATTGTT | TTTTTTAGAT | TCTCTCGGGC | CTAGCCGTCC | TTGGAACCCG | 120 |
| ATATTCGGGC | TGGGCGGTTT | CGCGGCCTGG | GCCTAGGGGC | TTAACAGTAG | CAACAGAAGC | 180 |
| GGCGGCGCG  | GCAGCAGCAG | CAGCAGCAAT | CTCTTCCCGA | ACACGAGCAC | CACAGGCGCC | 240 |
| CGAAGGCCGG | AACAGGCGTT | TAGAGAAAAT | GGCAGACGAT | ATTGATATTG | AAGCTCTAGC | 300 |
| TCGAG      |            |            |            |            |            | 305 |

## (2) INFORMATION FOR SEQ ID NO:845:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

|            |            |            |             |            |            |     |
|------------|------------|------------|-------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACCAGAAAAA | ACTTACATTG  | AAGAGAGGAT | TCCTTGTTTT | 60  |
| GACTATGTGT | GTTTCTGCCG | TCTTAGGCAG | CCAACGTATT  | GGTTTACATG | GATCTGGAGG | 120 |
| ATTATGCACA | CTAGTGTTGA | GTTTCATTGC | AGGGACAAAA  | TGGTCCCAAG | AAAAGATGAA | 180 |
| AGTCCAAAAG | ATTATTACGA | CTGTATGGGA | TATTTTCAA   | CCACTTCTTT | TTGGTTTAGT | 240 |
| TGGAGCAGAA | GTATCTGTTT | CATCGCTTGA | ATCAAAATATT | GTTGGCATAT | CTGTTGCCAC | 300 |
| TCTAAGTTTG | GCATTATGTG | TTCGAATTTT | AACCACATAT  | CTATTGATGT | GCTTTGCTGG | 360 |
| TTTTAGTTTT | AAGGAGAAAA | TATTTATTGC | TTTAGCATGC  | ATGCTCGAG  |            | 409 |

## (2) INFORMATION FOR SEQ ID NO:846:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGCACGGTA | CATACGATTA | TTATAAACAT | CAGCTGCGGT  | 60  |
| TCTGGGAGTG | AGCTTGTC   | GTGTTAGTGC | CATCTCCCTG | ACAAATCTGA | CCTGTACCCA  | 120 |
| CATCTCAGGC | TGGGAAGGAG | TAGCTGGGCC | TCCCTTTAAT | GCAGCGGCAC | TGGTTTGGGT  | 180 |
| CACAAGAGCT | GGTTTGATCA | ACCCCTGACT | CCCCCTGGCG | GGAGGTGCTC | GTACACATCTG | 240 |
| GGAGCCTGAG | CAGAGGTGCC | GGGGGCTTGG | AAGCTGGAGA | AATGATGGAT | CTTTCTCCAG  | 300 |
| GAGAAACAAT | TCTTATCTTC | ACATCNGCCC | CGTGCTCCAA | ATGAAGAGCG | CGTTTGCCATA | 360 |

GCTGCTCGAG

370

## (2) INFORMATION FOR SEQ ID NO:847:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 504 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT  | ACGCGCGGCC | GAGCGGAGGC | GGAGTCGGCG | CCGAGAACAT | 60  |
| GGCTGGAGGC | AAAGCTGGAA  | AGGACAGTGG | GAAGGCCAAG | GCTAAGGCAG | TATCTCGCTC | 120 |
| ACAGAGAGCT | GGGCTACAGT  | TTCCTGTGGG | CCGCATCCAC | AGACACTTGA | AGACTCGCAC | 180 |
| CACAAGCCAT | GGAAGGGTGG  | GTGCCACTGC | TGCCGTGTAC | AGTGCTGCCA | TCTGGAGTA  | 240 |
| CCTCACTGCA | GAGGTGCTGG  | AGCTGGCAGG | TAATGCTTCT | AAGGATCTCA | AAGTAAAGCG | 300 |
| TATCACTCCG | CGTCACTTGC  | AGCTTGCAAT | CCGTGGTGAT | GAAGAGTTGG | ATTCTCTTAT | 360 |
| CAAGGGTACC | ATAGCTGGGG  | GTGGTGTGAT | CCCTCACATC | CACAAATCTC | TGATTGGAAA | 420 |
| GAAGGGACAG | CAGAAAAC TG | CTTAGAGGGA | TGCTTTAACC | AACCTCTTCC | TTCCCCGTCA | 480 |
| TTGTACTGTA | ACTGGGACCT  | CGAG       |            |            |            | 504 |

## (2) INFORMATION FOR SEQ ID NO:848:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 436 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

|            |             |             |             |             |            |     |
|------------|-------------|-------------|-------------|-------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT  | AAACAAGCAG  | AGGGACTCCC  | CAGATAGCTT  | CATACCCAGT | 60  |
| TTAGCTTTAT | AACAAGTGTA  | GTTT TAGGCT | CTGTCTTGCC  | ATACTTGAGA  | GCACAATGGC | 120 |
| TGCTTCAAAA | CAGGCATT TG | AATCGCTGT   | TTAATCAAAT  | TCTTCTTTAA  | TCTAAAGTGA | 180 |
| GTTTCTCATA | GAGAGCATAT  | ACACTTAACC  | CTTGAACAAT  | GTAGGGGT TG | GGGTGGGGAG | 240 |
| TCAACCCCTT | GTGAAGTAAA  | AATTTGCTAA  | TAAC TTTTGA | CTCCCCCAGA  | ACTTAACTAT | 300 |
| AAATAGCCTA | CTATTGATTG  | GAA GTGTTAC | CAACAGCATA  | CACAGTTAAC  | ATATATTTTG | 360 |
| TATGTAATAT | GTGTTATCCA  | CTATATTCTT  | ACAATAAAGT  | TAGCAAAAGA  | AAAAAATGTT | 420 |
| ATTAGGAATC | CTCGAG      |             |             |             |            | 436 |

## (2) INFORMATION FOR SEQ ID NO:849:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 502 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACATGAGCCC | AGGAGTTGAA | GGCTATAGCC | TGGGTGACAC | 60  |
| AACAAGGCC  | CATCTCTAAA | AAATATATAA | ATAAATAAAG | TTAAGGATGC | TGCCGTGTTT | 120 |

```

ATATGTTTCAG AAAGAGATTG AGGTAATAAA AGAGTTTTTG GCCAGGCTCT GGCTTACACC      180
TCGGCCTCCC AGAGTGCTGG GATTACAGGC ATGAGCCACC GCGCCCAGCC GGAAGTAGGT      240
TTTTTGAAGA GTCAGTGAA AACAACTGTT GCCGTATTTC GAATTTAAAA TTTTAATTG      300
AAAAATATTAT AACTGAGAAA TTATTGTATA TATTATGGT ATACAGCGTG ATGTTATGAT      360
ACATGTATAC AATGCAGAAT GATTAAATCA AGCTATTTAA CATAGCTGTC ACCTCAAATA      420
CTATTTTGTG GGTGAGAAAT TTGAAATTTA TTATCTCAGG AATTTTGAAA TGTACAATAC      480
ATTATTATTA ACTGTTCTCG AG                                         502

```

## (2) INFORMATION FOR SEQ ID NO:850:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

```

GAATTCGGCC TTCATGGCCT AGATAAAAAG AAACAAAAAA GAGAAGATAT GATAAGAGAA      60
CAGAAGATAT ACCATAAATA TTTGGCACAG AGACGTGAGG AAGAAAAAGC TCAGGAGAGAA      120
GAATTTGACA GAATATTAGA GGAGACAAG GCAAAGAAGT TGGCTGAGAA GCACAAGGAG      180
CTGAGACTTG AAAAGGAGGC AAGGAGACAG CTTGTGGATG AGGTCATGTG TACAAGAAAA      240
CTTCAAGTTC AAGAAAAGTT GCAACGAGAA GCTAAGAAGC AGGAACTCGA G              291

```

## (2) INFORMATION FOR SEQ ID NO:851:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

```

GGTTCGTAT TCTGTTGGTT GGAGTGTCT ACTATTGTTG GGTGGAGTGT TCTATCTTCT      60
GTTGGGTGGA GTGTTCTGCT GTTGTGGGT GCGGTGTTGT ATATTCTGTT GTTGGGTGGC      120
GTGTTGTATA TTCTGTTGTT GGGTGGCGTG TTCTATCTTC TGTGTTGGG TGGATGGATT      180
GTTCTGTATT CTGTTGGGTG GCATGTTCTA TCCTCTGTTT TTGGGTGGAG CGTTCTATCT      240
TCTGTTGGGT GCGCATTCT ATATTCTGTT GTTGGGTGGC GTGTTCTGTA TTCTGTTGTG      300
GGTGGCTCGA G                                         311

```

## (2) INFORMATION FOR SEQ ID NO:852:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 532 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

```

GAATTCGGCC CTTTCATGGCC TAGTCTCATC TCAGAGTACT CAGAGAACT ATTTTAAAT      60
CTCTAGATAT CAATCAATGA ATATTTATTA TTAAATACCT GCTATGTGCC AGATGGTGTT      120

```

```

AATTATAAGT TTGTTCTCTT TTTGTCGTGC TACTTAGGCT TTTATCATT TGTCTATCA 180
TTAGGGAAGT GGCTCCNNNN CTTACAGCTA ATTTTTTTTT CAATTACTA ATGACTTTTT 240
GTGGAGGTGG GGATCTCTTC TGTTCACAT TTTCTATGAT TCATCTCAAT CCTCCAGTGA 300
TTATTAAAAA ACAGTTGCAG TAAGTTCAGT CATAGGGGCA CTGGAATGAG TCCTTAAAC 360
TTTATGCTGC TGCTTTTGCA ATGATGGATT GCCTGAGAAT TAAGGAAAGA TAACTACTCT 420
CTTGGTCACT GTATTTCCAA TCAACCATAT CCTCCCAGAA TATGATTCT TCCCTCAGGC 480
ATTTTAGAAA AGAGACAAGA GACAGATTTT TTTTTCAGG CAATGACTCG AG 532

```

## (2) INFORMATION FOR SEQ ID NO:853:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 415 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

```

GAATTCGGCC TTCATGGCCT ACTTTTGGAT AAGCAACTAG TGGTCTCATT ATCAGAGGTC 60
CCTGAGGGGC CCTACAGGCC CCCCAGGTT CTGCCCCCAA GATTCTAAGA GAGACCTTGT 120
GCTAGGGCTC TAGTCTTGAT GTTCTTTGCA TTGTTTGGAT ATGAAGCCCA GGATATGTGG 180
GCACAATAAG GTAAATCATG AGATGTGAAG GAGAATGAAG ATCAGGCCAG AGGTCACCAT 240
TCATTGAAGA GCCAGAGAAA AAGAAAATTA GTGCACAGAT TTGTGTAGAT TTACAGAGAA 300
CTTCTATTTG CTGCAAGAAC TTCATCAGGC GCTGCACCAT GCCTGATTG GAAAGGAGCT 360
TCTTTGGGGC CTGATAGAAC TGAATTAATA TGAAGAAATT GAAGTGGCTC TCGAG 415

```

## (2) INFORMATION FOR SEQ ID NO:854:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

```

GAATTCGGCC TTCATGGCCT AGTAAAATTA GCTGAAAAAT AATTTTCCAA TGCAAATACT 60
AATGAGGGTT ATATGACCGT TGTCCAAAGC ATTTGCAGTG CTGCATGACA TTTGTCCTAA 120
AACCTGACTC TTAACACATT CCTTGTGAAA ATAGAAATAT TCCCATGCCT AGATTCCAAA 180
TAATAAAAGA CACTGAGAGT GTTTTCAAAA TTAATGGACT GATTTAAATT TCACTGGAAA 240
GCAGCTTTTT AAAACTAAAT TGTCTGGATG TGGCCTCCCT GTGATCACTT CCAACTGCTT 300
ACTGCCAACT TCTGGCGGCT CGAG 324

```

## (2) INFORMATION FOR SEQ ID NO:855:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 616 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

```

GAATTCGGCC TTCATGGCCT AACGGCCTTC AGATGGAAGG AGGGCAGGTG CATATCTGTT      60
AGCAAAATCT TCACAATCAT CTTGAGTTTC TCAGCAAAGT CGGCCTGGCT GGAAATTCCT      120
GGCGCTGCCA TGCTGAAGGT GACCAGCAAC ACAGCCCCCA GGATGGTCAG TTGTTCCAGC      180
TGCAACTGGA GCTCGTGGAA GCGAGACTGG TCCATTAAAA CTGTTTCGGG GAACGGCCTC      240
TGGAGGTGGT CCCACTTCAG AAGCTTCAGG TAAGCGTAAT TCTGGACAGC AACAGGGCTC      300
AGCCTGGGCA TGTCCTCCAGA GCCAGCAGCC ATTCCCCCCA CTGGCAGGGC GTGTTTATAC      360
TTCTGAGTCA TAAGGTCCTC TGAGGCTTCT TCCAGCCACT GGGTGACAAA GTCCAGGGAA      420
TTTGGTTGCC TCTCCAAAT CTCTTGAAC TTCTTCTTT CGTATTCAAC TGACTGCTGC      480
ATGAGATGAG GCCTGATGCT ACTGATAGCA AAGTTGGCCA TGTCCACTTT CATTAGGTCC      540
AACACAGAAA AAATTTCTCT GAAAAGGGGC ACTATTTCTT TAATGTCCTT TAGTTTCTTA      600
ACTTCTCAT CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:856:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

```

GCTCTGGGTG AAAAGATCTC ACACCAATGT ACATAATGTG GCCATCCTTT CCATTTTCAA      60
GAAGTTGCCT TGCTTTGATA CTGCAAATTC AGTATTGTGA CACTGGAATG ATAAAAAGAT      120
GTTCCTTTT CTTTTCAGCC AGAAAGCTTC CTCGTTGTGT GTGTGCGTGT GTGTCCCCTC      180
CTATTGCCTG TTCTTTCTAA ATCTACATTT TGTTACCTTA TCCAATACTT GCTTTAGCAA      240
GAACATTATG GGGCCCAACA TATTCCACAG GGCCATGCCA ACCTTTGGAA AAAAGGTAGG      300
TCAAGGAAGA AATCAGAACA AACCTGTGA CCATTCCACC TCCTTGCAATC TTGGGCTTGG      360
GTTTGAAAC TGACCAGCAA GCTGGAGCTG CCACCACAGA GAAACATCAA AGCAAAAGGG      420
TTCCAGGACC AGAGATTAGG TAACTAGCTA CAGGCCAGAG GAATGCTTCC CTCTCTAGAT      480
CAACAAGCAC CCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:857:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

```

GTTTCATGGCC TAGATGCTGG TTTGTTTTG TTTTCGTTT TTTGAGACAG TCTTGCTCTG      60
TGACCCGGGC TGGAGTGCAG TGGTGCGATC TCGCTCATG CAACCTCTGC CTCCCAAGTT      120
CCAGCAAGTC TCCTGCCTCA GCCCCCACC GAGTAGCTGG GACTACACGC AAGTGCCACC      180
ACGCCAGCT ACTTTTGTG TTTTGTAGT AGATGGGGTT TCACCATGTT GGCCAGGCTG      240
GACTCGAATT CTGACCTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:858:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

```

GAAACTATAA TCATCAGTAC TGTAATGAGC AATTATGAGG CCTACAAGCC TTCCACAGGA      60
GCTATGGGAG ATCGACTAAC GGCAATGAAA GCAGCTTTCC AGTCACAGTA CAAGAGTCAC      120
TTTGTTCAG CCAGTTTAAG TAATCAGAAG GCTGGAAGTT CTGCTGCTGG GGCAAGTGGG      180
TGGACTAGTG CAGGGAGCTT GAATTCTGTT CCAACTAACT CAGCACAACA GGGCCATAAC      240
AGTCCTGACA GCCCCGTGTC CAGTGCCGCC AAGGGCATCC CAGGCTTTGG CAATACTGGC      300
AACATCAGTG GTGCCCCTGT GACCTACCCG TCTGCCGGAG CCCAAGGAGT CAACAACACA      360
GCTTCAGGGA ATAACAGCCG AGAAGGGACT GGGGGCAGCA ACGGGAAAAG AGAGAGATAT      420
ACTGAGAACC GGGAACTCGA G                                     441

```

(2) INFORMATION FOR SEQ ID NO:859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

```

GAATTCGGCC TTCATGGCCT ACTGGTCGCC AATGTGCTGC AGGTCATGGC TCCGGAATCA      60
AATGGGGCTC AAACGGGGCA AGCTCCAACA CAGTGGAGCC TGGCGCTACT CCCACCTCCA      120
CCTTCCGAT CTCAGAGCTG CAGGATGGCT CTGCCCACCG CACCTGAGC TGGCCCCGCT      180
TGGGGCTGGC ATTGGGGGAC AGTGTGTTCT GGGCGTCTCT GCTCCTCTCT GCTGGTGCCT      240
GTGCCTCTGC TGGCCGCCCA CTCATAGATG TCAGAGCCAC AGGACGGCCC CGCAGAATCC      300
CTGCGCCGAC CCTGCCGGGG GCTGGCTTTG GTGCACATGC AACTCGTCAT CGTGGTCCCC      360
ATGGGCACCT CTGCTCTTCT CGAG                                     384

```

(2) INFORMATION FOR SEQ ID NO:860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

```

GAATTCGGCC TTCATGCCTA CGTTTCCCGA GAAACCAAGC CACAAAAAGT ACAGGGCCGC      60
CCTGAAGAAG GAGAAACGAA AGAAACGTCG GCAGGAACTT GCTCGACTGA GAGACTCAGG      120
ACTCTCACAG AAGGAGGAAG AGGAGGACAC TTTTATTGAA GAACAACAAC TAGAAGAAGA      180
GAAGCTATTG GAAAGAGAGA GGCAAAGATT ACATGAGGAG TGGTTGCTAA GAGAGCAGAA      240
GGCACAAGAA GAATTCAGAA TAAAGAAGGA AAAGGAAGAG GCGGCTAAAA AACCGGCAAG      300
AAGAACAAGA GAGAAAGTTA AAGGAACAAT GGAAGAACA GCAGAGGAAA GAGAGAGAAG      360
AGGAGGAGCA GAAACGACAG GAGAAGAAAG AAAAAGAGGA AGCTTTGCAG AAGGGCTCGA      420
G                                     421

```

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

|   |     |
|---|-----|
| GGATTCTTTT GGAATGGGCA AAGAAGTGGG GAATCTGCTA CTGGAAACT CACAGCTTCT  | 60  |
| GGAAACCAA AACGCCTTGA ATGTGGTGAA GAATGACCTG ATTGCCAAGG TCGACCAGCT  | 120 |
| GTCCGGGGAG CAGGAGGTGC TGAGGGGCGA GTTGGAGGCT GCTAAGCAGG CCAAAGTCAA | 180 |
| GCTGGAAAAC CGTATCAAGG AGCTGGAAGA GGAAGTAAA AGAGTGAAGT CCGAGGCCAT  | 240 |
| CATCGCCCGC CGTGAACCCA AAGTTCTCGA G                                | 271 |

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 288 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

|   |     |
|---|-----|
| GCGGCTCTTT GGGAGGTGGT CAGGGGAAAA GATGGTCAGT GCTTTTCTG GACAAATCCA  | 60  |
| GGGGCCAATT GAGGTGGGGA GTCTATGAGA AGGGCCCTGT CAGCTGAGGC GAGGGAAAGG | 120 |
| GCAGAGGACC TAGAATAAAA GGATATGGCC TCTCTGTGCA CTAGCAGGAT GGGTAGGAAA | 180 |
| GGGAGATATG AAAAGACGAA ATGGGGACCG GGTGCGGTGG CTCACGCCTG CAATCCCAGC | 240 |
| ACTCTGGGAG GCCAAGGCAG GCAGATCACC CGAAGTCAGG AGCTCGAG              | 288 |

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 326 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

|   |     |
|---|-----|
| GCTCGAGTGG AATGGGCCGA GGAGATGGAT TTGATTCTCG TGGCAAACGT GAATTGATA  | 60  |
| GGCATAGTGG AAGTGATAGA TCTTCTTTT CACATTACAG TGGCCTGAAG CACGAGGACA  | 120 |
| AACGTGGAGG TAGCGGATCT CACAACTGGG GAACTGTCAA AGACGAATTA ACAGAGTCCC | 180 |
| CCAAATACAT TCAGAAACAA ATATCTTATA ATTACAGTGA CTTGGATCAA TCAATGTGA  | 240 |
| CTGAGGAAAC ACCTGAAGGT GAAGAACATC ATCCAGTGGC AGACACTGAA AATAAGGAGA | 300 |
| ATGAAGTTGA AGAGGCTCTT CTCGAG                                      | 326 |

(2) INFORMATION FOR SEQ ID NO:864:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 546 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

```

GGAATGGGGA GAGGGATCTA CCAAGGTNAC AGCAGTTTTT TGAGCAGCTG GCACGTGCCT      60
CTGCTGCCAA CATGATGAGG TACAGAACCC AGCACAGGGA ATGCTCAGCC TGTGACTGTG      120
AGCTGGATGT GAGAGTCTCC TGAGGACCC TCGTATACTC AGAGCATTTC CTCTCAGGGT      180
GCAGGAAGAG GAAAGCAGAG GAAGTGGACT TGAAGGACCA AAGGTGGGAT CCTAGCTGGG      240
CCAATCACTG AGAAGCCATG TGGTCTTGGG CAAGTCATTG CCTTCTCTGA GCCTCAGTTT      300
CCCCATCTGT AAAATGGAGG TAATGATACT ATGCCTACCT CATCATCATG CTGTGAAGAT      360
TAAATGAGTT ATGCCATGGA AGTGTGTGAC ATTACCCATT GATAATGTCT CAGTGGCCCTC      420
TCAATGAAAT GGAGTGTGAC AGAGTGCCAC ACTCTGAAAC GGCTCATCCC CGGTGATGGT      480
GCTGGGACTA GAACCCGGGC AACCTCGCAG TGCCATGCCC TACTGCATCA CTACGTCCAC      540
CTCGAG                                         546

```

## (2) INFORMATION FOR SEQ ID NO:865:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 808 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

```

GAATTCGGCC AAAGAGGCCT AAGGATTCAT AGTATAAATC TTTAATTTAT CACAGTCTGT      60
ATTAAGTAAT ACTAAACCAC TTCGCATATA AATACATCAC AACAGTATAC TTCCGTTTAT      120
GCTATCTTGG TCTTTGTACT TTTGTTTTTG TACATTTTAC TTTGGCATAA ATGTCAAAGT      180
ACAGTATTGT TATTTAGCTT TAAATATTCA TTTGCCCTCTC TCCTTAATGT AAAAAGGCTT      240
CTTCTCAACT TCCTGACATT TCTTGCTAAA CTATACACGT CTGCCCTGTT TTCCAACAGC      300
ACACTGTTCT GTACTGTCCC TTATTTATTT TTTTTTTTTT TTTTTTTTGG AGACGAGCTC      360
GTTCTTTGCC CAGGCCGGAC TGCAGTGGTG CTATTTCCGC TCACTGCAAA CTCTGCTTCC      420
CGGGTTCACG CCATTTTCCG GCTTCAGCTT CCCGAGTAGC TGGGACTACA GGCGCCCGCC      480
ACCACGCCCG GCTAATTTTT TGTATTTTGA GTAGAGATGG GGTTCCTCCG TGTTAGCCAG      540
GATGGTCTTG ATCTCCTGAC CTCGTGATCC GCCCACCTCG GCCTCCCAAA GTGCTGGGAT      600
TACAGGCGTG AGCCACCGCA CCTGGCCTAT TCTGTCCCTT TTTAAAGCAG TTCTCTTTTA      660
AAAAATTGTG GTAAGATATA AATCACATAA AATTTGCAGT TATAACCATT TTAAGTATA      720
TAATTCATG GCATTAATTA CAGTCACAGT CTTTACAAC TATTATTACT ATGTATTCCT      780
AAAGTTTTTT TACCCTCCCC CCCTCGAG                                         808

```

## (2) INFORMATION FOR SEQ ID NO:866:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAAT GGCTTCAGTA AGTTAGGATG AAAAATGAAA      60
ATATAAAATA AAGAAGAAAA TCTCGGGGAG TTTAAAAAAA ATGCCTCAAT TTGGCAATCT      120
ACCTCCTCTC CCCACCCCAA ACTAAAAAAA GAAAAAAGG TTTTCTAATG AAAATCTTTA      180
AAAATACTGT CAGTATTTTA AAATTTTCAA CAGTATTATA AAAACATTGC ATCTCCCCAC      240
CTCTAATATG CATATATATT TTTCCTGCTA AAATTGGTTT CTACAATTGA GTAAATGGCA      300
AATACATGAA GCAATGTCCC TAAATTTTAT AAAGAAATTA TATTTAATGC ACATTCTCGA      360
G                                         361

```

## (2) INFORMATION FOR SEQ ID NO:867:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 880 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAAAA      60
CAGTCPTTTA ACCTTTCAAA ATGCCACAAT GTGCATTTTA GATTGCCCTT AGTTTCCCAA      120
CTCTCAGTAT ATAGAGACTC AATTAGAAAA GAAATGGTGC TAGTAGCTTC AACCCACTGG      180
TATGTATTTG AGGAACTGTT CCTGGTAGAA GGCAGTACCG TGTCCCTTGG TATTGCTACT      240
GTGCCTGCTA TGTTACTTCT TTATGTATAT GATATGGAAG TAACTCCTTT TATACATGTG      300
GAGAAGTTTC ACAGCTTTTT TTCATAGTCA TTGCATTAAA ATGTCTGCTG AGGCTGGGTG      360
TGGTGGCTTA CGCCGGTAAT CCCAGCACTT TGGGAGGCCA AGGTGGGTGG ATCACCTGAG      420
GTTGGGAGTT CAAGACCAGC CTGACCAATA TGGTGAAACT CCGTCTCTAC TAAAAATACA      480
AAAATTAGCT GGGTATGGTG GCGCACACCT GTAATTCCAG CTCGCCCGG GCGACTCGAC      540
CAAAGAGGCC GGAATTTGGC CCTCGAAGCC AAGAATTCGG CACGAGGGGT ATTTTTATTT      600
TTANTTNTTC TGTTTCTCTC TNGAGTGTAT AGTGTAGAGG GGGTTTCTGT CTGAGTGTGA      660
GGCCTGGAGA TTTCCCTTAT ATGGTACAAA CCAGCAATGA ATTAAGAGGT CTCTTTTCTC      720
CAAGATCTAG TGTTTGTAC TAGGAGAACT CTAAAAAGTA TCTATTTTAC TGTAGTGCCA      780
AAGTACAAAT TTATTTGGAT TTATTTTGTG CCATCTTATT TTTTAATATA TTTCTTTTTC      840
TATGTTGTGC TTCTTTCCCA CCTCATCTCT CCTCCTCGAG      880

```

## (2) INFORMATION FOR SEQ ID NO:868:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

```

GAATTCGGCC TTCATGGCCT AGTCATGGCT TTAGAATCTG GAGAAGAGTC TGACTCACTT      60
CTTTCCTGAG GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGATCC CGAACGACTT      120
CTCTGCCCCA GGGGAGTCCG AGCCACAGTT TTCTGATCAA CTGATGATTC TGACCCGCTT      180
CTTTCTCTCT GGGGGGTAAG ACACTTGTG TTAGCTCTG GGGATGATGG AGAACGACTC      240
CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTTCGTTGGG AAGAATCACA TTCGCTTCTC      300
CCTCTAGATG GCGTTCTAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC      360
CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:869:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGCCTA | GAGGATCTTC | TCCTGACCCA | GCATCGCTCA | TCACAATGAA | 60  |
| GAACCAAGAC | AAAAAGAACG | GGGCTGCCAA | ACAATCCAAT | CCAAAAAGCA | GCCCAGGACA | 120 |
| ACCGGAAGCA | GGACCCGAGG | GAGCCCAGGA | GCGGCCCAGC | CAGGCGGCTC | CTGCAGTAGA | 180 |
| AGCAGAAGGT | CCCGGCAGCA | GCCAGGCTCC | TCGGAAGCCG | GAGGGGGCTC | AAGCCAGAAC | 240 |
| GGCTCAGTCT | GGGGCCCTTC | GTGATGTCTC | TGAGGAGCTG | AGCCGCCAAC | TGGAAGACAT | 300 |
| ACTGAGCACA | TACTGTGTGG | ACAATAACCA | GGGGGGCCCC | GGCGAGGATG | GGGCACAGGG | 360 |
| TGAGCCGGCT | GAACCCGAAG | ATGCAGAGAA | GTCCCGGACC | TATGTGGCAA | GGAATGGGGA | 420 |
| GCCTGAACCA | ACTCCAGTAG | TCAATGGAGA | GAAGGAACCC | TCCAAGGGGG | ATCCAAACAC | 480 |
| AGAAGAGATC | CGGCAGAGTG | ACGAGGTCGG | AGACCGAGAA | GCCCTCGAG  |            | 529 |

## (2) INFORMATION FOR SEQ ID NO:870:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AATTGAGCT  | TCAAGTCTCC | ATGTGTATAA | TGTGGGGTTG | 60  |
| ATGCTGTGGT | GCTCCAAGGT | GTTGGGGGGT | TTTAGGCAGA | GTTCTTATGC | TTAATATAGG | 120 |
| ATGGAAAAGT | GTTCGAGCTT | CTTCCCTTTT | CTCTTCTTC  | TCTTCATCTG | ACATGAGCCT | 180 |
| GGGGTTCTAC | CTCTTCAGCA | TAATTCATCC | TGGAGTACT  | AATTCTATCT | CCCCATTGAT | 240 |
| TTTAGTGTCC | TGTCTGTTTC | TAAATCTACT | GGGCAGTTGG | AGACATTGTC | TTTGTTCCTC | 300 |
| TCATCTATCT | TCTGTATCCA | CAGTTGATAA | TTGTCTATGT | TTTTAGTGTG | TTTTAAGGAA | 360 |
| ACTAGTCTCG | AG         |            |            |            |            | 372 |

## (2) INFORMATION FOR SEQ ID NO:871:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGTGGTGGG | TGCCTGTAGT | CCCAGCTACT | TGGGAGGCTG | 60  |
| AGGCAGAAGA | ATTGCTTGAA | CCCGGCAGGC | AGAGGTTGCA | GTGAGCTGAG | ATCGTGCCAC | 120 |
| TGCACTCCAG | CCTGGGTGAC | AAGAGTGAGA | CTCTGTCTCA | AAGAAAAGAA | ACAAAAAATT | 180 |
| ATGTACACAA | ATATGGACAG | CACTGGCAAG | AAGTGTGGCA | AAAACACATG | TGGTTCCTCT | 240 |
| GTTTTGGGCT | CAGACATGTG | GCTGTGCCAT | TACAGACCCC | CGGGATTTAG | AATCCTCCTT | 300 |
| CTGAAAGGCG | TCCTGTGCAC | TCGTGAGCAC | CAGCCTGAAC | AGATGAAAAG | GCTGAGCTGG | 360 |
| AGGGGCTGGG | ACACAGCCCA | CCTTGACGAC | AGCTGCTCCT | GGCTGTGCGG | GGGGGTCTCC | 420 |
| AGGAAAGGCC | ATTCTCCAC  | TAGGATCGCC | AGGCCCTACT | GAGGCTCAAG | CTCCTTTGCT | 480 |
| GTTTGGAATC | TTCCCTCCCC | AGCCCCCAG  | CCTCATCAAA | GGCTGCCTTT | TCCTGTTTCA | 540 |
| TGACCACAGC | TGCTTTGACT | CCATTAGCCT | CGAG       |            |            | 574 |

## (2) INFORMATION FOR SEQ ID NO:872:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

```

GAATTCGGCG TTCATGGCCT ACCAGACTAC TACGGACTCA TCTAACAAAA CAGCACCCGAC      60
TCCAGCATCC AGTGTACCA TCATGGCTAC AGATACAGCC CAGCAGAGCA CAGTCCCCAC      120
TTCCAAGGCC AACGAAATCT TGGCCTCGGT CAAGGCGACC ACCCTTGGTG TATCCAGTGA      180
CTCACCGGGG ACTACAACCC TGGCTCAGCA AGTCGCAGGC CCAGTCAACA CTACCGTGGC      240
TAGAGGAGGC GGCTCAGGCA ACCCTACTAC CACCATCGAG AGCCCCAAGA GCACAAAAAG      300
TGCACACACC ACTACAGTTG CAACCTCCAC AGCCACAGCT AAACCTAACA CCACAAGCAG      360
CCAGAATGGA GCAGAAGATA CAACAAATTC TGGGGGGAAA AGCAGCCACA GTGTGACCAC      420
AGACCTCACA TCCACTAAGG CAGAACATCT GACGACCCCT CACCCTACAA GTCCACTTAG      480
CCCCGACAA CCCACTTCGA CGCATCCTGT GGCCACCCCC AACTCGAG      528

```

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

```

GAATTCGGCC TTCATGGCCT AAGCTGCACA AAACGTAGAA AGAAGACATA GCGCCTGCCA      60
GGGGAATAGG AAATGAGGGC ACTTACACAT TAATGTGAAT TAGTAATTGT GGTATAGAAA      120
TGTTTTATAG TGAAGAGATC AAATTTGCTT TTCAAGAAAA ATGCCAAAAG CTATTTAAAT      180
AATTCGAGGT TACATCGTAG GTTTTGATTT TTCTCAATT AAGATACAGA AATACAGCAA      240
GCCTTAATAT AAAGTTTCCT AAAGTTTCTT CAAGTATTTT TTAAGTGGA GAAATGCAGG      300
AATTGTATAA CCAGAATTGT TTCTGCCTTT AGCTTTTCAG AACTTGAGAT GTGGCAGCAC      360
TGGACTGGGT TTTTAAAT GTTAGGACTA GGAATGTTT CTCTTGTTAA TTATGAATTA      420
ATTGATTATT AAGTTTAGAA TGCATTTTA CAAGTATCTA ACTATCAAAT TGTGTTTAGT      480
AACTTGAGTG TATGCACAAG TTTGATCAAC AGCAAAATAG AGTTCTGAAT TTCTTTTAAA      540
GTGATGATAT ATTATTTTGT GAACTTTGT GTTTGAAAAT GTTTATTTCT GTTTATGGTG      600
TAATACTCGA G      611

```

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

```

GAATTCGGCC TTCATGGCCT ACGAGCGGTG AAGGAGGAGA CCAAGGAGGA TGCTGAGGAG      60
AAGCAATAAA TCGTCTTAT TTATTTTCTT TTCCTCTCTT TCCTTTCCTT TTTTAAAAA      120
ATTTTACCCT GCCCTCTTT TTCGGTTTGT TTTTATTCCT TCATTTTAC AAGGGACGTT      180
ATATAAAGAA CTGAACTCAA CATTGAGGTT GTTTTTTTT TTGTTTCTAA GTTTTGGCC      240
TATTGAAGAT GACTTCAGAA AATCCATTCC CCAGTCATGA AAATGTACTG TGCTATTCTC      300
GAG      303

```

(2) INFORMATION FOR SEQ ID NO:875:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 348 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

```
GAATTCGGCC TCATGGCCTA ACGGCAGCGG CAGCCTCTGA AAAGAATCGG GGCCCAAGAA      60
AAGGCGGTCTG TGTTATCGCT CCCAGGAAGG CGCGCGTCTG GCAGCAGCAA AAGCTCAAGA      120
AGAACCTAGA AGTCGGAATC CGGAAGAAGA TCGAACATGA CGTGGTGATG AAAGCCAGCA      180
GCAGCCTGCC CAAGAAGCTG GCACTGCTGA AGGCCCCAGC CAAGAAGAAA GGGGCAGCTG      240
CCGCCACCTC CTCCAAGACA CCTTCCTGAG GACGCTGGCC CCAGTGCAGG CCAACATCCC      300
ACCCCTTACC TCCATATGGG ACCTTGCAAG TCATCCCACT TCCTCGAG      348
```

(2) INFORMATION FOR SEQ ID NO:876:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 586 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

```
GAATTCGGCC AAAGAGGCCG GAATTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAGAC      60
TATTTTCCAT TTCACACAAG AAATCTTTGA TTATTCAGTA AAAAGAGGAA ATATAAGAAA      120
AAAAATCAGA CTAGTCTGGC CAACATGGTC TAAAAATACA AAATTAGCCA GGCATGGTGG      180
CGGGCGCCTG TAATCCGAGC TACTTGGGAG GCCCAAGCAG GAGAAATCGCT TGGACTCGGG      240
AGGCGGAGGT TGCAGTGAGC CGAGATCATG CCACTGCACT CCAGCCTGGC AGACAGAGCA      300
AGACTCCCTC TCCAAAAAAG TTAAAAAAAA AAAAGAAAAA AAAGGCCGGG TGCACTGGTT      360
CGGCCTCCCA AAGTGCGGGG ATTACAGCGG TGAGCCACCA TGCCCGGCCA CTTTCTGTAT      420
TTTTTAATAA ATAAGAAATA CACATTAGT AGTAGTTACA AAGATCTGTA GGCCGTAGCA      480
AATATTCAGT AACTGGAAGA TGCCAATGAA CATGTGTTGG TAGTATTTAA ATAACAAAAT      540
GTTCAATAT TTGACAAGAT TAACAACACT ACACGGCCTT CTCGAG      586
```

(2) INFORMATION FOR SEQ ID NO:877:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 445 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

```
GAATTCGGCC AAAGAGGCCG GAATTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGTAA      60
TTTTAAAAAT TTATGTATTT TCTAGCATTT GCCTCAAGGA TTGAAATTTT TTTTITACT      120
TGTGTTTACA GGTAGAATTC TTTATTTAAA AAGTCAGTTG AATATCAAAA CTATTTGATA      180
TTCTTCAGAC TGGAATATTA TTCTCTAGTG TAGAAGAAAA CATTTTCTGC TTACAAAACA      240
AATAGTAAAT ACTCTAAAT AGGGGTGGC AAACCTTTCT TAAATAAAAG GCCAGATGGT      300
AACTATTTTA GGTGTTGTGG GCCATGTGTT GATAACTATT TTAGGTTTTG TGGGCTACGT      360
ATGGGGTCAC TCTCCCATTC TCTCTCTCTC TCTCTCTCTC TCTCTCTTTC      420
```

TGTGTGTGTG AGCGGCGCTC TCGAG

445

## (2) INFORMATION FOR SEQ ID NO:878:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

```

GAATTCGGCC AAAGAGCCGG AATTGGCCCC TCGAAGCCAA GAATTCGGCA CGAGGGGGTC      60
TCCATTCCCC GAGAAGCCAG GGGCAGGGTG GGATGGGGAA GACCAGGAGC AGAGTCGAGC      120
CTCACAGAAG CCAGCGCGGG TCTCTGCTCA GCACCCAGC CGGGGCTCTG GACCCAGGGT      180
AACAGCCCCA GTTCATCCCA ACCCCTCTCA GAGCCTCAAG AGGGGTAGCT CGGCTGCCGG      240
AAGAGAGGGG TGCCCTATCC CTGGCAACCC CTCACGTCG CGTACCCAG CACCTGCCAC      300
CGCCTTTGCC ATTTCTTTGA GCTGAAGTT AACTCTCTTA GAGTCTAACT TTGGTTCATT      360
TCTGCACAGG TACAATAGAT GACTTTATTT GTTTAAATG TTTAATATAT ATACATACAT      420
ATATATATAT TTGTCTGTAA GAATTATGTT TTAACAGCT GCTGTAGAGT ACCTTTTTTT      480
AAGTAAATCT TACAGTGGAG TATATTTTTT AAAGCACAAA ATTGGTGCCA AGACTGGGTG      540
AGAAATGTAC ATTACCCCTT TATTATTTTG CGTCGGATTG CTCGAG      586

```

## (2) INFORMATION FOR SEQ ID NO:879:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

```

GAATTCGGCC AAAGAGCCGG AATTGGCCCC TCGAAGCCAA GAATTCGGCA CGAGGGGAAA      60
ATCTTGTCCT AAAAATATAT GAGTTTGGGG GTAAGGGGTG GGATAGCCAA GCAAATCAG      120
TAATTATTTT AAAATGAACA TATGAATTTT TATTAACTTT TAGTTAAATA CAGATTTTAC      180
AACGAGGTCA GCATAAGCCT AAATCTATAT AGAGGGCTAA CTCAGGCATT GTCTTGTTTA      240
TTTGTAGACT GGATTAAAAA CAACCTGTCC TGTTTGTGCA GTTCCAGCT TCTTCGTTTA      300
GAATAAATTA GACCAAAAGA AGAACGTGC TTGTCTCTGT ATACCCGCAG AATGAAGTTA      360
CTGTTGTAA AACCGGATT TTTCAATTTA CTAGGTTCCG CTCTCTCCCT CGAG      414

```

## (2) INFORMATION FOR SEQ ID NO:880:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

```

GAATTCGGCC AAAGAGGCCG GAATTGGGCC TCGAAGCCAA GAATTCGGCA CGAGGGTAAT      60
TTTAAAAATT TATGTATTTT CTAGCATTTG CCTCAAGGAT TGAAATTTTT TTTTACTT      120

```

```

GTGTTTACAG GTAGAATTCT TTATTTAAAA AGTCAGTTGA ATATCAAAAC TATTGATAT      180
TCTTCAGACT GGAATATTAT TCTCTAGTGT AGAAGAAAAC ATTTTCTGCT TACAAAACAA      240
ATAGTAAATA CTCTAAAATA GGGGTTGGCA AACTTTTCTT AAATAAAAGG CCAGATGGTA      300
ACTATTTTAG GTTTTGTGGG CCAATGTGTG ATAACATTTT TAGGTTTGTG GGGCTACGTA      360
TGGTGTCATT CTCCTATTCT CTCTCTATCA CCTACCCTCG AG                        402

```

## (2) INFORMATION FOR SEQ ID NO:881:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGGCC      60
GTTTTTTTTT TTTTTTTTTT TTTTTCNNG NNAGGCTTTC CCTAGGTGAT TTTTAATTGC      120
TATTATAAAT AAATATCCAT TTTTCCATA AAATATTGCT ATATGTTAGT ATATTAATCT      180
TGTACTGTGA CCTTTTCAA CTCTATTGGT TCTGATAGCT TGTCAGTTGT CTACCTTTCA      240
TCTTCTAGGT AAATATTTCT TACAAATAAT GAGATTTGCT CCTACTTTC AATTTATCTC      300
ATTACTTTTA CTNNTCTTAC TGCACTGGCT AGGACACCAC TACCTTCTCG AG              352

```

## (2) INFORMATION FOR SEQ ID NO:882:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

```

TTTTTTTTTT TTTTAACTT AAAAATAGTT GTATTATAT TCCACAATTT GTTCAAATAC      60
TGGTTTTCTT ATAACTTTT TACAGGATGT TTTTAAACAA ATTCTTCACA TTGTGTTTGT      120
ACTATGTACT TGCGGAATTT CAGGGAAATA GTTCTGTGTA TTTTAAATAG CTTAATTTGT      180
ACTAAAGGGA TGGTAGGTGG TCACATGCAG TCCATGTGGG ATTCTAACAT GACATTAGT      240
GAGTTTTCTG ATGTGGACCA TCCCTTTGAT GCTGAAGGTA ATGCATCTGT TGAAAGAAGT      300
GACTGTAGAT TTGGATTACT GCTCTCTGCA TCTCCCTCTT TTCTGCTCGA G              351

```

## (2) INFORMATION FOR SEQ ID NO:883:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

```

GAATTCGGCC TTCATGGCAA GAAGGAGNCT TAGCATCAAA CTTTGGAAAG GGAAGCCAGA      60
GAAAAAGGTA GAATGGACAA GTGACACTGT GGACAATGAA CACATGGGCC GCCGTTTCATC      120
CAATGCTGCT TGTATTTATG AGAAACTCG GGCCTTTGGC GAGAGCTCCA CGGAAAGTGA      180

```

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| TGAGGAGGAA | GAAGAGGGCT | GTGGCATACA | CACTGTGTAC | GTGGCCACCG | CAAAGGACGG  | 240 |
| GTNTTGCAAC | CCTAGGACCG | ACCCCCACCA | CCCTTCCCCA | GCTCCTGACC | NTTCCCAGCC  | 300 |
| CCCTCCAGGG | CCAATGCAGC | ACTAAATCCC | TCTTCTCTCC | AGCATTCCTG | TGTCGTCTCG  | 360 |
| GCCCTAAATG | TATCCATGTG | GCTACTTCTC | CAGCCCCCTC | CTTCCCTNTC | TTCTGCCTGA  | 420 |
| TAGAGGGAAG | AGGAAGAGGA | GGACGAACAG | AGATCCTGAA | ATTCTGACTT | GCTGCTATTG  | 480 |
| CAGAACCCAG | CCTCCTGGGT | TTCCCCAGTC | CTCATTTTTC | CTCCCAATAC | CCACCCCTTCT | 540 |
| CTCTCGAG   |            |            |            |            |             | 548 |

## (2) INFORMATION FOR SEQ ID NO:884:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 446 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAAAAATACA | AAAAATTAGC | CGGGCGTGTT | GGCGGGCGCC | 60  |
| TGTAGTCCCA | GCTACTTGGG | AGGCTGAGGC | AGGAGAATGG | CATGAACCTG | GGAGGCGGAG | 120 |
| CTTGCACTGA | GCCGAGATCG | CGCCACTGCA | CTCCAACCTG | GGAGACACAG | CGAGACTCCG | 180 |
| TCTCCNAAAA | AAAAAAAAAA | AAAAAACAC  | ACTTGTCTTA | CAAAGACTAA | CAAAAGATAC | 240 |
| AAAATAAAAT | AACTTTACAG | CATCATTAGA | AAGCGAACAA | AATCCTAAGA | TAGATACATT | 300 |
| TATCTTTCTT | GTTTTAGAAC | TTTTTCTGTG | TAATGGAATG | GAAATGCTTA | ATCTTGTTC  | 360 |
| AATGTTTCA  | GTGTTGTGC  | TTGTCAAAT  | TGAGGTTGGA | TGTTAAAGCC | CTTACTACTG | 420 |
| TATTATACAA | AGCAGCGAAC | CTCGAG     |            |            |            | 446 |

## (2) INFORMATION FOR SEQ ID NO:885:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGCCGGCGCC | GCCGNGTCTT | CCCGGTCTCC | TTTCCGGGCC | 60  |
| GCACAGGGTT | TTATAGGATC | ACATTGACAA | AAGTACCATG | GAGTTTTATG | AGTCAGCATA | 120 |
| TTTTATTGTT | CTTATTCCTT | CAATAGTTAT | TACAGTAATT | TTCCTCTTCT | TCTGGCTTTT | 180 |
| CATGAAAGAA | ACATTATATG | ATGAAGTTCT | TGCAAAACAG | AAAAGAGAAC | AAAAGCTTAT | 240 |
| TCCTACCAAA | ACAGATAAAA | AGAAAGCAGA | AAAGAAAAAG | AATAAAAAGA | AAGAAATCCA | 300 |
| GAATGGAAC  | CTCCATGAAT | CCGACTCTGA | GAGTGACCT  | CGAG       |            | 344 |

## (2) INFORMATION FOR SEQ ID NO:886:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 388 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

```

GAATTCGGCC TTCATGGCCT AAAAATCTAA ATTAAGTGAT GAATAATTTA AAACAGAATT      60
TCAACATTGA GACAATGTAG AGATATATTA TGGTATAAAA TGAAGCATTT GCACGAACTT      120
TTTAGCTAAA ATTGTGTTCA AAGAAGTTGC TTTTGTTTT AGTGACCTT GAGTTCAACA      180
CAGATGTGAA TGCCCGCTTT TTCCAGAAGG GTTCTTGGGA GAAACACTG GAGAAGTTCT      240
AAGCACTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTAGA GATGGTTTCT TACTCTGTG      300
TTCAGGCTGG AGTGCAGTGT TGCAATCATA GCTCACTGCA GCCTTGACCT CCTGGCCTCA      360
AGTGATACCC CTGTCTCAGC CTCTCGAG      388

```

## (2) INFORMATION FOR SEQ ID NO:887:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

```

GCCCCAGTCT AAGGCATTTA AAATTAAACA GCTCTTCAAC GCCCCAAGTT ATTTCATCAG      60
GCTAAGAACT TCTCCGAGAA ACGCACAGA AGGCAGGCAA ACAGGTGGGT AGGTGAGAGG      120
TCACGGGGCT CCATCTGCAA GCTCCATCTA CAAGGCATCA ATCTGCGTTG TGGCATCAAC      180
GTTAAATGT TCTACAGCTT AGGGATCTTC TTGAAGCAAG GTTCCAAGCA CAAAACTAGT      240
ATGACCGGAG GCTCAATTTA GAAGATGCAG CATCTGAAAA CCTTTACCCC AGGAAAGGAG      300
GGGTGCCTGC TGGCATTTCAT GGGCTCTGGA ACAAGCATTT ATTCAAAGCT GATGGCCCCCT      360
CGAG      364

```

## (2) INFORMATION FOR SEQ ID NO:888:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

```

GCACCCCAA ATGCCAGCCT CTCCTTTCTT CCCATCCACC AGTATACTGC GGGGCCATTT      60
CTGGTCTTTG TCCAACAGGA AACCCATTTC TGGTGGGATA TGCCTTCCAG TGCCACAGGG      120
CCACTCACCC CATGCATCTC TGTCTGCCC GTCAAGTCTG GGACGGACAG CAAGGGCAAG      180
CCCAAGTGTCT GCGGATAGG TGGGTGGGAA CAGAGAGGGG AGAATGCCGT CCTAAGCTTC      240
TGCTTGGGGA TCCCCACAC GACCTGGGTA CTGCCTGGGA AACCTGTCCT AAGTAAACT      300
ATGGACCTCG CCTCGCCAC CGGCCTGCGA AGCCAGCATC TCCGTGAAGG TGGATGGAAG      360
CGCCTTGTG CTCATTGTA GCTGCAAGCT GGGTCAGCGG CTCTGAAGCC CTCGAG      416

```

## (2) INFORMATION FOR SEQ ID NO:889:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

|   |     |
|---|-----|
| GTAGGCCATG AAGGCCGAAT GGAAAAAGTC AGTTAAAGAG GACTCAGTCC CCACAGGTGC | 60  |
| GGAGGAGAAT GTGGTGTGTG AGTCACCAGT AGAGATTATA AAGTCCAAGG AAGTAGAATC | 120 |
| AGCCTTACAA ACAGTGGACC TCAACGAAGG AGATGCTGCA CCTGAACCCA CAGAAGCGAA | 180 |
| ACTCAAAAGA GAAGAAAGCA AACCAAGAAC CTCTCTGATG GCGTTTCTCA GACAAATGAC | 240 |
| ATCAGACTCC ACAGAAAAGA CTATCACACC GCCAGAGCCT GAACCAACAG GAGCACCACA | 300 |
| GAAGGGTAAA GAGGGCTCCT CGAAGGACAA GAAGTCAGCA GCTCTCGAG             | 349 |

## (2) INFORMATION FOR SEQ ID NO:890:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 719 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGGATGCT CTGGGTTTGC TGTAAGTCGTC | 60  |
| TGTTACTGGT CNTGTTAGGA GGAGGGCCAG GGGGACCCCC ACCTGGGGCA GTCCCTTCTG  | 120 |
| TCCCTTCAGC AGGTGGCTGA GCTGGAGCAG ACATTTTCTT GACAGAGAGA GTGAGGGTCT  | 180 |
| GTTCCTCTCC GGAGGCTGCG GCGAGACACC CGGCGAGGGA CGCTGCGGCT GAAGTGGACG  | 240 |
| GAAGTGGCAA GCTCCGCCTC GCGCCGACTA CCCCAGCGTC TAGCTGCGCT GGGGTTTCAC  | 300 |
| CATGTTGGCC AGGATGGTCT CGATCTCTTG ACCTTGTGAT CTGCTTGCCT CGGCTTCCCA  | 360 |
| AAGTGTCTGA ATTACAGTA TGAGCCACTG TGCTTGCAC CTGTCAAATT ATTTTACTGT    | 420 |
| GTTTATTAC CATGTTTCTT TCACTGTGGG GTCTCTGTCC TTGCTGTTTT GTTTTCTTT    | 480 |
| TAACTTCTTT TGTATTATAG GAAGGTTTAT ATTAATATTT TAATTCTACA TTGGATAATT  | 540 |
| CCTATATCAA AACTATTGTT GACAATCAGT TACAGATGGA ACTTCGTCTA CTCCTTCTCC  | 600 |
| CCTTCTCACT CTGCTCTTT CTCCCTTCT CACTCCAGCA GTTGACTAGT CTCATTGAAA    | 660 |
| AAACAAATTG GGGCCGGCCA GGCATGATGG CTCATGCCTG TAATCCGAGA CAACTCGAG   | 719 |

## (2) INFORMATION FOR SEQ ID NO:891:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AGATACTCCG CTGAAGATCT GATGTCACCC CAAATGCATG  | 60  |
| GCTCCAGCCT CAGTTCAGCT TTCCCACTG CTGTCAGAAA TTCCTTCATT TATCTTGAGT   | 120 |
| TTCTCCTCTC ACTCCCATGG TAGCTTTTCC ATTCCCACTG CCTCTTCTCA CATTTTCAGTA | 180 |
| GATGAGAATA GAAGCCATAG GAAGCAAACT TCCTCAACCT CCAGCCAACC GCCGAGCGAT  | 240 |
| GGGCATCTCT CGGACAACCT GGCACAAGCG CCGCAAAACC GGGGGCAAGA GAAAGCCCTA  | 300 |
| CCACAAGAAG CGGAAGTATG AGTTGGGGCG CCCAGCTGCC AACACCAAGA TTGGCCCCCG  | 360 |
| CCGCATCCAC ACAGTCCGTG TCGGGGAGG TAACAAGAAA TACCGTGCCC TGAGGTTGGA   | 420 |
| CGTGGGGAAT TTCTCCTGGG GCTCAGACTC GAG                               | 453 |

## (2) INFORMATION FOR SEQ ID NO:892:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

```

GAATTCGGCC TTCATGGCCT ACCAGCCTCT GGGCTGAGGC AAAGACCTCT GAGGCCCCGT      60
CCACCCAGGA CCCCTCCACC CAGGCCTCCA CTGCGTCCTC CCCAGCCCCA GAGGAGAATG      120
CTCCGTCTGA AGGCCAGCGT GTGTGGGGTC AGGGACAGAG CCCAGGCCA GAGAACTCTC      180
TGGAGCGGGA GGAGATGGGT CCCGTGCCAG CGCACACGGA TGCCTTCCAG GACTGGGGGC      240
CTGGCAGCAT GGGCCACGTC TCTGTGGTCC CTGTCTCCTC AGAAGGGACC CCCAGCAGGG      300
AGCCAGTGGC TTCAGGCAGC TGGACCCCTA AGGCTGAGGA ACCCCTCGAG      350

```

(2) INFORMATION FOR SEQ ID NO:893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

```

AACAGGAGAT GGACAAGCTG AAGGAGCAAT ATGATGCTGA GTTGCAAGGC CTGAGGGAGA      60
GTGTGGAAGA AGCAACCAAG AATGTCGAGG TCTTGGCGAG CAGGAGCAAC ACTTCAGAGC      120
AAGACCAGGC GGGGACTGAA ATGCGCGTGA AGCTTCTGCA GGAGGAGAAT GAGAAGCTGC      180
AGGGAAGAAG CGAAGAGCTG GAGCGGAGAG TTGCTCAGCT TCAAAGGCAG ATCGAGGACC      240
TGAAAGGCGA TGAAGCCAAG GCGAAGGAAA CGCTGAAGAA GTACGAGGGA GAAATACGAC      300
AGTTAGAGGA GGCCCTTG TG CACGCCAGAA AGGAAGAAAA AGAAGCTGTG TCAGCCAGAA      360
GGGCCCTGGA GAATGAAGTG GAGGCTGCTC AGGGAATCT GAGTCAGACT ACCCAGGAGC      420
AGAACGAGTT GTCTGAGAAG CTCAAAGAGG AGAGTGAGGC GCTCGAG      467

```

(2) INFORMATION FOR SEQ ID NO:894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

```

GAATTCGGGC TTCATGGCCT ACTCAGCTTT CCTGGTCTCC CATCTGAAC TCTTCTTGT      60
GCACCTCTTG TTCTTTCTCT TGGCTCCAG TCTTGATTCC TGTGATCACT CTTGCATCAC      120
TAATTGCACA AGTGATTTC GGTGCAATTC TGATTAGCCT GCGTCCACAC AGTGATCGAT      180
GATCCTATGT GCCTAGAAAG GACACTGTGT GCTGCTCATG ACCTGCAACA GAAAAAAGC      240
CATTCTTGT TAGCAGTGTA AGAACCTTAG AGCAAAGGAG TTGACCTTCT GATTGAATAT      300
AAGCACACC TCGAG      315

```

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```

GGGCTTAGTT AGGAGCTATG GCTAAACATC ATCCTGATTI GATCTTTTGC CGCAAGCAGG      60
CTGGTGTGTC CATCGGAAGA CTGTGTGAAA AATGTGATGG CAAGTGTGTG ATTTGTGACT      120
CCTATGTGCG TCCCTGCACT CTGGTGCGCA TATGTGATGA GTGTAACAT GGATCTTACC      180
AGGGGCGCTG TGTGATCTGT GGAGGACCTG GGGTCTCTGA TGCCTATTAT TGTAAGGAGT      240
GCACCATCCA GGAGAAGGAC AGAGATGGCT GCCCAAAGAT TGTCAATCTG GAGGAACCTG      300
AG                                                                                   302

```

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```

GAATTCGGCC TTCATGGNCT ANTCTCATTI NAAATATATC CTTACTGAAA CATCTGGAAT      60
AACGTCTGAC CAAATATCTG GGTACAGTGA TCCAGCCAAG TTGAGACATG AAATTAATCA      120
CCATGGCCTA CATTTTATC TGTTTGGCTG CAATTCTGTC AAAGGCTTCT GCTCTTCATA      180
ACATTTCACT CACTAGCTCC ATGAAGCCAT ATGATACAAA CCTTGCCTGT GTAGCCTTCA      240
CTTTTTTCCA AAAGAAGTCT ATTAAATGCC AATCAAGTAT CTTCTCCTCC AAGCTCAGTA      300
GCTCGGGCCT TCAACAGCTG TTCCCCATTC CGATCCATCT CCCTGAGCTA CCCTGGCATT      360
CTTATCAGGA CACTGGAGGA ATCTATGTAT GTGCCTCTAA AGATTCAGCA CCCAAACATG      420
ATAGAAATCA CTGTGTTTAC ACTGTATCTC TATATCTGCC CATCCCGCTC GAG                   473

```

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 594 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```

GCTCGAGTGA AGTGGTATCT CATTGTGGTT TGGGTTTAA TTTTATAATA TTTTAATTTT      60
TAAATCAAAA AGAATATACT GGGGCTGGGG TGGTGGCTCA AGCCTGTAAT CCCAGCACCC      120
TGGGGGGCCA AAGGGGGTGG ACCACCTGAG TTTATGAGTT CAAGACCAGC CTGGCCAACA      180
CGGTGAAACC CCATCTCCAC TAAACATACA AAATCAGCC GGGTATGGTG GCAGGCACCC      240
GTAATCCAG CCTCTCAGGA GGCTGAAACA GGAGAATCAC CTGATCCGGG AGGTGGAGGC      300
TGCCATGAGT CAGAATCACG TCACTGCACT CCAGCCTGAG AGGAGACCCG TACAAAAAAA      360
AAAAAAAAAA ATATATATAT ATACACACAC ACACACACAC ACAAGGATTT TAGATTGAA      420
AATGATGTTT TTTACTCATT TCAAAATGTA CTGTAACCTT TCTTGGTTC TTAAGTTT      480
CATTTAACTT TCTCTGTTT CAAGAAAAAT TGTCTTTATT GACATTTGTA AAAAAGAATG      540
TGTTTTGCCC AGTTATTAAG TATTTTATTT TTATGCAATT TCAGAACACT CGAG                   594

```

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACTGTACATT | TTTTTTAAAG | TTTGTGAAA  | AGAATATTGT | 60  |
| CTTATTCTAT | AAAACATTTC | AAACCTAGTT | AGAGATTGT  | AATCAAAAAA | CATTTCGCGA | 120 |
| GAAAGCAGCA | CTTAGGGCTG | CCTGTTCTAT | ACCCTACAGT | CAGACAGGAA | AAGAAGTAA  | 180 |
| AATGGCACCC | TTCTGACATT | CTGAGGCAGC | TGGACTGGCA | GCCAAGTAAA | GGAGAGTGAT | 240 |
| GAGGTGGTGT | GGGGAGGGTG | GGGAGGCAGC | GCGAGGGTGC | TCTCCACAGG | GTAGGTCTCG | 300 |
| AG         |            |            |            |            |            | 302 |

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 475 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| GCGGCCTTCA | TGGCCTAGTG  | CTTGTCAGTT | TGGAAAGTCA | CAGGGAGTTT | ACCATTCTAT | 60  |
| AATTAGAGTA | GGAGGAAAAAT | GAGAACCCAC | TGGTAGAAGA | AGAAGCAACA | GTCTTCTAGG | 120 |
| GTCTGGCATT | TGATGAGATA  | GGTATTCAGT | TACTGTGCAT | TTCCATTGTT | TTTCCATGGC | 180 |
| AGAACATACG | GCAGAGATT   | GGGAAGTCGC | ATGCCTGAAG | CCAGGTTATT | CTTATGTTCT | 240 |
| GTAACATGTT | TGCTCGCAGG  | GCTGTTGTTG | TCAGAGTAGT | GAGTTGTGCC | CCAGACAAAT | 300 |
| GGGGTGCTGG | TCTGCTCCCA  | CAAATCTTTA | TCCCAGTCTT | CATCGCAAGG | AGGGCACTGC | 360 |
| CAAGTGCTCT | CAGCCAGAGT  | CTCTTGCTTA | AGGCTCCTGG | TTTGGTTGAC | AACATCTTGC | 420 |
| TCAATACAAC | TTCTGTCATC  | ACAGCTTGAG | ATATGATGAC | TAATTCAGC  | TCGAG      | 475 |

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 507 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACAGCTGCCT | TTTTCTTTAA | AGGGGTTCTT | GTCTTCTGGA | 60  |
| ATTCCCTTTA | CTAGAGGATC | CTCTCCAGAA | CGTCTTTCAA | TATAGTTCTT | TATTTCTTCA | 120 |
| GAACATTTAG | ACACTTGTG  | TCTCTGCAAC | TTCACTTCTT | TGCGAAGCTG | CTCAACTTCC | 180 |
| ATTTTCAGTT | TTTCCTTCTC | TGGCAAATCT | TCGATGTGAA | GGGCAGGCAT | TTTCGCCCCA | 240 |
| GAACCGGGCT | CAGGCTAGCT | CTGGCAGCGG | AGCCGCTGGA | AGAGCGGCGA | AGCTCGGCGC | 300 |
| GTCCCGAAAC | AACTGAAGGC | CTGGCCCGCC | GCCCACCCGC | GCAGGATGTG | ACTGCAGCCC | 360 |
| TGCTGCGGTC | CCCAGCTCCC | CGAGGGCTTG | GCTTTCTCCG | GGACGCTTGT | CACGCCAGCG | 420 |
| TGCCCCAGCT | TCCTAGGACC | TGAGAACTCT | GCCTTTTCTC | AAGTCCCTGC | AACCCAGGAG | 480 |
| GCCTGCCCCG | GTGCTAGTAG | GCCATGA    |            |            |            | 507 |

(2) INFORMATION FOR SEQ ID NO:901:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

```

GAATTCGGCC TTCATGGCCT AGTTTGGATT TTCATATTAG GGATACTCAA CTGGTATTAT      60
TATTCTGGCC CCTGCAAATT TTTCAGTAGG TCCCCTAGTA TGTCATGCCA GGGACTATGN      120
GAGTTCCTGG GAATAGCACT GTAANACATT CTTGAGTGGG TCCTTGACTC CATTGAGTTT      180
ATAATCTCGT AGGAGGAAGG CTATGAAGAA TTCTAATAAA GCAAAGCAAG CAATCACAAAC      240
AAACCTTCCT CTTTAACTTA TCAAAAATGG AAACCTTGAA GAGCTGCTCT TTAATAAATC      300
ATTGGAAAGC ACCAGGACCC AGGTGTTTTG ACTCAGCCTC ATTCAGACT GAGATCTGAG      360
GCCATGATAA CTCATGTGCC TATATATGCT GATAATCACC ATTACCTATA CCATTCTTTA      420
CATTCTCTCA TCTACACAAT CATCTTCAAC TCTCTCTCAT CCACTTCAGC GATTGAATTC      480
TTTACCGGCC TCGAG                                     495

```

## (2) INFORMATION FOR SEQ ID NO:902:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

```

GAATTCGGCC AAAGAGGCCT AGAATTCAG ACCTAGCTCA ACCCATGCCT CTTTTCCTTC      60
CTTCCCTCCT TCCTTTCTTT CTTTTCCTT TTCTCCTTCC CTCCTTCTC CTTTCTTCC      120
TTCTCTCCCT CTTTCTCTTT CTCCTTCTT CTTGCTCTTC CTTCTTCTC CCCTCCCTCC      180
CCTCCCTTCT TTCCTTTCCT CCCTCCCTTC CATTCTTTC TCCCCACCC CCCGTTTCTT      240
CTCTTTGGAG AGATGTACAG CTCGAG                                     266

```

## (2) INFORMATION FOR SEQ ID NO:903:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

```

GAATTCGGCC AAAGAGGCCT AAATGAGAGC TGAGTGAAGT GGATGCCCCT TATAAAAACA      60
TCAGATCTCG TGAGAACTTA CTATCACTAG AATAGCATGG GGGAAACCAC CCATGATTCA      120
GTTACCTGCC CCCAGGTCTC TGCCACCACA CATGGGGATT ATGGGAAC TA CACTCAAGA      180
TGAGATTGG GTGGGGACAC AGGCAAATTA TATCAGCTGT TGTGCTCAT AGTTTGATA      240
TCATCCTTGG CTCCTTTAGC ACTATAAGG CAGGATTGAG TCCTTGCAAC AGAAACCATT      300
CAGCCTGCAA AGCTGAACCT ATTTACTTTC TGACCCTTTA TGGAAAAGTT TACTGATCTC      360
TGGACTAGAC AGTTTTTTAA AAATGACATC TTATGACCGG GATTCTCGAG      410

```

## (2) INFORMATION FOR SEQ ID NO:904:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 326 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

```
GAATTCGGCC AAAGAGGCCT AGCCGAGACT CTGTCTCAAA AAAAAGAAAA AAAGCTGCTT      60
TGGGTCTTAT GAGGGAGGGG ACTGGGAATC TAGGTGTTTC AAGCGCCCCA GGCGATTCTT      120
AAGGTCACAC AAGCTTGGGA GACACTTCAT TAAGCAAAAT CTTTGGCCG TTTTGTCTG      180
GTTGAGCCTC AGTGTCTATT CATTGAGTGG TCACCAAGAG TTTGGGGTGG ACTGATCATC      240
AGCATTTACA GGTTTGGAAA TTGAATTTAG TTTTACTACT CAGAGCTTAT TAGACTTGAG      300
CAGATTTAAA CGGAAGGACA CTCGAG                                     326
```

(2) INFORMATION FOR SEQ ID NO:905:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 410 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

```
GAATTCGGCC AAAGAGGCCT AGGAACTGTT TTGACCCTGA AGGCTATTTA ATCCACTGTC      60
CCCTACAAGG CCTCACAGT GCTGGGGGAA AAAAAACAGC AATGAGGATG ATCCTGAGTT      120
AATGTGTATG CTCGCAAGA GAGCTTGCCCT ATACCTTGAT TATTTCATAA AATCACATGT      180
TAATACATTG CTTTCAGAAT GAAATACTGA CTTGATCTGA TAGGAGAAAA TGGTAATATT      240
TCATAGTTGT TTTCCAAAGA CAAATTTAAA TGTGTCTGT TATCTCCTTA CTTAGTTTAA      300
GAATTTAGTT TTGAACCCCA TTGACTTTGT CATTTGCAAT TTTAAAAATA TTTGGGACTG      360
GGCATGGTCG CTCACGCCTG TAATCCCAGC ACTTTGGGAG GCATCTCGAG                                     410
```

(2) INFORMATION FOR SEQ ID NO:906:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 498 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

```
GAATTCGGCC AAAGAGGCCT ACGCTTCCCG GGTTCAGCG ATTCTCCTGC CTCAGCCTTT      60
TGAGTGGCTG GGACTACAGG TGGATGCCTC CATGCCCTGGC TAATTTTTTG TATTTTAGTG      120
GAGACAGGGT TTCACCGTGT TGCCCGGGCT GGTCTTGAAC TCGTGAGCTC GGGCAATCCA      180
CACTCCTTGG CCTCCCAAAG TGCTAGGATT ACAGGTGTGA GCCACTGCAC CCGGTCGAGG      240
TACAGTTTGG AAGTTCATGC AAATCTCATC ATTTGCTCTT CTGCAACAAA ACATTTTCTT      300
TCAACTTATT TTGCCTGTGT GAAGCTCAGT GCTTTAACTC ATATATGGAG TTATCTTCTT      360
CCCTCAGACT GGAGACGTTG GTGAAATTGG GGCTAGACTG AAGATGTCTA AGGTGGCTTG      420
ATTGACAAAG GTCTCTCCTC ATCCCCAAAA TAAATAACAT TTTTTCATT ATAATAGTAA      480
TACACCAGTC GACTCGAG                                     498
```

## (2) INFORMATION FOR SEQ ID NO:907:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

```

GAATTCGGCC AAAGAGGCCT AACTGGTGC TGGTTTCACA TCACGACAGC AACGGGATTG      60
TTTTGCTTTG AAAATGTTGC AGTCCACCTG TCCAACCTGA TCTTCCGGAC ATTTGACTTG      120
TTTCTGGTTA TCCACCATCT CTTTGCCTTT CTTGGGTTC TTGGCTGCTT GGTCATCTC      180
CAAGCTGGCC ACTATCTAGC TATGACCACG TTGCTCCTGG AGATGAGCAC GCCCTTTACC      240
TGCGTTTCCT GGATGCTCTT AAAGGCGGGC TGGTCCGAGT CICTGTTTGG GAAGCTCAAC      300
CAGTGGCTGA TGATTCACAT GTTCACTGC CGCATGGTTC TAACCTACCA CATGTGGTGG      360
GTGTGTTTCT GGCACCTGGG CGGCCTGGTC AGCAGCCTGT ATCTGCCTCA TTGTACACTG      420
TTCCTTGTCT GACTGGCTCT GCTTACGCTA ATCATTAAAT CATATTGAC CCAGACTCGA      480
G                                                                                   481

```

## (2) INFORMATION FOR SEQ ID NO:908:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 764 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

```

GAATTCGGCC AAAGAGGCCT AGAAACAATG GTTTCAGAC ACTGAAAGTT CATAGTACAG      60
GACTGTGATC TCTGCGAGAA GGGGAATAA TGAGGTGAGT CCAGTGATTG CTCAGGCGAA      120
TGGCCTGGAG GCAGTTTCTA GGCAGCAAAG CAGGGAGAGG GAAGCCAGAG ACCAGTGGTC      180
CTGCTGTGTT GAGGAGATGG AGATCAGTGT CACCGGAGGC CAAGGTGAGT AAGTGAGAGG      240
AGAGGAGGCA GCAGCACACA GACAGAGAGT GCTGTAGATC TGCAGTGGGT CCCCTGGAGT      300
CCTTGTTGA GTGAAGGTGT TAGAAGAAAC TACTTAAGCC AAGAAATGAG TAACTGGAAA      360
TTAGTAGAGC AAATAATTTA CAGATCATCT ATGGGGCTGG GAAAAGTTTG TGTTTCCACT      420
AGCCAGAGTA GAAATAACTC ATAATGCATG GGTCAATCAGG TGGAGTCCTC CAACAGGTGT      480
TGCCTTAGTA CTGAGGTCAA ATTGTCCCTA GACCAAAGGC TTCTTTGGAC TTCCCCTAAC      540
AAAGCTTAAA GACAAGCCTT GGAAGGATCA AACTAATTTC AAGAACTTA ACTGTGAATC      600
AGAATAAAAC CCAATACCAT TTATAGGAAT ATAACAAAAT CCATCAACAN ACNACATAAC      660
ACTCATAATT ACCAACATTC AGTAAAAAAT TACTGGAAAC AGAGAAATAT AAATTATGGC      720
CCATAATTAG GAAAAAAGGG TAATCATTAG AGGTAGAACT CGAG                               764

```

## (2) INFORMATION FOR SEQ ID NO:909:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

GAATTCGGCC AAAGAGGCCT ACTAAGGACT TGTTCGGAA GGAGCTGACT GGCCAATCAC 60  
 AATTGCGAAG ATGAAGGCTC TGTGGGCCGT GCTGTTGGTC ACATTGCTGA CAGGATGCCT 120  
 AGCCGAGGGA GAGCCGGAGG TGACAGATCA GCTCGAG 157

## (2) INFORMATION FOR SEQ ID NO:910:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

GAATTCGCGG CCGCGTCGAC AGAATAGACC TGGTTGTGA ATTATGGCCT GGATTTCAC 60  
 TATACTCTCT CTCCTGGCTC TCAGCTCAGG GGCCATTTC CAGGCTGTG TGACTCAGGA 120  
 ATCTGCACTC ACCACATCAC CTGGTGAAAC AGTCACACTC ACTTGTGCTG CAAGTACTGG 180  
 GGCTGTTACA ACTAGTAACT ATGCCAAGTG GGTCCAAGAA AAACCAGATC ATTTATTAC 240  
 TGGTCTAATA GGTGGTACCA ACAACCGAGC TCCAGGTGTT CCTGCCAGAT TCTCAGGCTC 300  
 CCTGATTGGA GACAAGGCTG CCCTCACCAT CACAGGGGCA CAGACTGAGG ATGAGGCAAT 360  
 ATATTTCTGT GCTCTATGGT ACAGCAACCA TTGGGTGTTT GGTGGAGGAA CCAAACGTGAC 420  
 TGTCTAGGC CAGCCCAAGT CTTGCCATC AGTCACCCCTG TTTCACCTT CCTCTGAAGA 480  
 GCTCGAG 487

## (2) INFORMATION FOR SEQ ID NO:911:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

GAATTCGCGG CCGCGTCGAC AGTTACTGAG CACACAGGAC CTCACAATGG GATGGAGCTA 60  
 TATCATCTCT TTTTGGTAG CAACAGCTAC AGGTGTCCAC TCCCAGGTCC AACTGCAGCA 120  
 GCCTGGGGCT GAGCTGGTAA AGCCTGGGGC TTCAGTGAAG TTGTCTGCA AGGCTTCTGG 180  
 CTACACTTTC ACCAGCTACT GGATGCACTG GGTGAAGCAG AGGCCTGGAC AAGGCCTTGA 240  
 GTGGATTGGA ATGATTATC CTAATAGTGG TAGTACTAAC TACAATGAGA AGTTCAAGAG 300  
 CAAGGCCACA CTGACTGTAG ACAAATCCTC CAGCACAGCC TACATGCAAC TCAGCAGCCT 360  
 GACATCTGAG GACTCTGCGG TCTATTACTG TGCAAGGGAC AGCTCAGGCT ACGACTATGC 420  
 TATGGACTAC TGGGGTCAAG GAACCTCAGT CACCGTCTCC TCAGCCAAA CGCTCGAG 478

## (2) INFORMATION FOR SEQ ID NO:912:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

```

GAATTCGCGG CCGCGTCGAC CCAGGATGCC GCGCAGCAGA GCTCTGATTC TGGGGGTCCT      60
CGCCCTGACC ACCATGCTCA GCCTCTGTGG AGGTGAAGAC GACATTGAGG CCGACCCACGT      120
AGGCACCTAT GGTATAAGTG TATATCAGTC TCCTGGAGAC ATTGGCCAGT ACACATTGTA      180
ATTTGATGGT GATGAGTTGT TCTATGTGGA CTTGGATAAG AAGGAGACTG TCTGGATGCT      240
TCCTGAGTTT GGCCAATTGG CAAGCTTTGA CCCCCAAGGT GGACTGCAAA ACATAGCTGT      300
AGTAAACAC AACTTGGGAG TCTTGACTAA GAGGTCAAAT TCCACCCAG CTACCAATGA      360
GGCTCCTCAA GCGACTGTGT TCCCAAGTC CCCTGTGCTG CTGGGTCAGC CCAACACCCT      420
CATCATGCTC GAG                                     433

```

## (2) INFORMATION FOR SEQ ID NO:913:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 139 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

```

GAATTCGCGG CCGCGTCGAC GCAAGATGGA TTCACAGGCC CAGGTTCTTA TATTGCTGCT      60
GCTATGGGTA TCTGGTACCT GTGGGGACAT TGTGATGTCA CAGTCTCCAT CCTCCCTGGC      120
TGTGTCAGCA GGAGAGAAG                                     139

```

## (2) INFORMATION FOR SEQ ID NO:914:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 166 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

```

GAATTCGCGG CCGCGTCGAC ATCATGGCTA CCCTGCGTGT CCCACTCCTG GTGGCTCTCG      60
TCCTTCTTGC TGTGGCAATT CAGACCTCTG ATGCAGGTCC CTATGGTGCC AATGTGGGAG      120
ACAGTATCTG CTGCCAGGAC TACATCCGTC ACCCTCTGCC ATCACG                                     166

```

## (2) INFORMATION FOR SEQ ID NO:915:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 590 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

```

GAATTCGCGG CCGCGTCGAC TTCTTGGGCA GCACAGAAGA CAGAGCCGAT TTTGACCAAG      60
CTATGTTCCC TGTGATGGAG ACCTTCGAAA TCAATGATCC AGTGCCCAAG AAGAGAAATG      120
GGGGGACCTT CTGCATGGCA GTCATGGCCA TCCACCTGAT CCTGCTCACG GCAGGTAAGT      180
CACTGCTGCT GATTCAAGTT CTCAATCTGC AGGAGCAGCT CCAGATGCTA GAGATGTGCT      240
GTGGCAATGG ATCACTAGCT ATCGAGGACA AGCCCTTCTT CTCGCTGCAG TGGGCACCCA      300
AAACACACCT GGTACCTAGA GCACAGGGGC TGCAAGCCTT GCAGGCCCAAG CTCAGCTGGG      360

```

```

TCCATACCAG CCAGGAGCAA CTCCGTCAGC AGTTCAACAA CCTCACTCAA AATCCAGAGT      420
TGTTCCAGAT TAAAGGTGAA CGAGGCTCTC CAGGTCCAAA AGGGGCCCCG GGTGCTCCTG      480
GAATCCCCGG GCTGCCTGGG CCAGCTGCTG AGAAGGGAGA AAAGGGGGCT GCAGGTCGTG      540
ATGGAACCCC AGGTGTCCAA GGACCCAGG GCCCACCAGG AAAACTCGAG                      590

```

## (2) INFORMATION FOR SEQ ID NO:916:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

```

GAATTCGCGG CCGCGTCGAC GGAAGAGCAA TGAAAACATA TGCTCCTACA TTATTCATGT      60
TTCTATGGCT GCAGCTGGAT GGGATGAGCC AAGGTGAGCA GGTGGAGCAG CTCCTTTCCA      120
TCCTGAGAGT CCAGGAGGGA TCCNGTGCCA GCATCAACTG CACTTATGAG AACAGTGCCT      180
CCAACACTTT CCCTTGGTAT AAGCAAGAAC CTGGAGAGAA TCCTAAGCTC ATCATTGACA      240
TTCGTTCAAA TATGGAAGA AAGCAGACCC AAGGACTCAT CGTTTTACTG GATAAGAAAG      300
CCAAACGTTT TCCTTGACA TCACAGACAC CCAGCCTGGA GACTCAGCCA TGTACTTCTG      360
TGCTGCAAGT GAGAGCACCA ATACAGGCAA ATTAACCTTT GGGGATGGGA CCGTGCTCAC      420
AGTGAAGCCA AACATCCAGA ACCCAGAACC TGCTGTGTAC CAGTTAAAG ATCCTCGGTC      480
TCAGGACAGC ACCCTCTGCC TGTTACCGA CTTTGACTCC CAAATCAATG TGCCGAAAAC      540
CATGGAATCT GGAACGTTCA TCACTGACAA AACTGTGCTG GACAATCTCG AG              592

```

## (2) INFORMATION FOR SEQ ID NO:917:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

```

GAATTCGCGG CCGCGTCGAC GAATGAGGTG CTCTCTTCAG TTCCTGGGGG TGCTTATGTT      60
CTGGATCTCT GGAGTCAGTG GGGATATTGT GATAACCCAG GATGAACTCT CCAATCCTGT      120
CACTTCTGGA GAATCAGTTT CCATCTCCTG CAGGTCTAGT AAGAGC                      166

```

## (2) INFORMATION FOR SEQ ID NO:918:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

```

GAATTCGCGG CCGCGTCGAC GTCTGAGAGG AACCTTCTC TGAGGATGGA CACTTCTCAC      60
ACTACAAAGT CCTGTTGCT GATTCTTCTT GTGGCCCTAC TGTGTGCAGA AAGAGCTCAG      120
GGACTGGAGT GTTACCAAGT CTATGGAGTC CCATTGAGA CTTCTGCCC ATCAATTACC      180

```

TGCCCCCTACC CTATAGTGAG

200

## (2) INFORMATION FOR SEQ ID NO:919:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

|   |     |
|---|-----|
| GAATTCGCGG CCGCGTCGAC CCAACCTTCC GGAAGCCTCC CCATCAGCAC CATGAACCCA | 60  |
| AGTGCTGCCG TCATTTCCTG CCTCATCCTG CTGGGTCTGA GTGGGACTCA AGGGATCCCT | 120 |
| CTCGCAAGGA CGGTCCGCTG CAACTGCATC CATATCGATG ACGGGCCAGT GAGAATGAGG | 180 |
| GCCATAGGGA AGCTTGAAAT CATCCCTGCG AGCCTATCCT GCCCACGTGT T          | 231 |

## (2) INFORMATION FOR SEQ ID NO:920:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 115 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

|   |     |
|---|-----|
| GAATTCGCGG CCGCGTCGAC GTTTTGTTAT TGTTACGAAG TAAATGATTC GTATGCTGTA | 60  |
| CATAGCTGTT ATAGAAGTGG CGATTAGTGT AATTAGTAGG GCTCAGGCTC TCGAG      | 115 |

## (2) INFORMATION FOR SEQ ID NO:921:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 213 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

|   |     |
|---|-----|
| GTTGAATTCT AGAAATCAAA ATTAATTGTA CAAAGGAAAA GCAGATGCCG GAAACTTCTT | 60  |
| CCCAGTCTGT CATACAATTC ACCACTGGCC AGGTGCTGAG AGAAGCATTA GGGAACAGTG | 120 |
| TGGGTTGTGT CAGAGTTGGA CGGCTCCATC CCTTTGGCTT CATTATCTTC CTCCTCATGG | 180 |
| AGATTCTAAA GCAACCCGTC GACGCGGCCG CGA                              | 213 |

## (2) INFORMATION FOR SEQ ID NO:922:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 504 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

```

GAATTCGGCC AAGAGGCCTA CTTAGAAGCC AAAGAAGGAG ATTTGCACAG GATAGAAATC      60
CCATTCAAAT TCCACATGCT GCATTCAGGG CTGGTCCACG GCCTGGCTTT CTGGTTTGAC      120
GTTGCTTTCA TCGGCTCCAT AATGACCGTG TGGCTGTCCA CAGCCCCGAC AGAGCCCCCTG      180
ACCCACTGGT ACCAGGTGCG GTGCCTGTTT CAGTCACCAC TGTTGCCCCA GGCAGGGGAC      240
ACGCTCTCAG GGACATGTCT GCTTATTGCC AACAAAAGAC AGAGCTACGA CATCAGTATT      300
GTGGCCCCAGG TGGACCAGAC CGGCTCCAAG TCCAGTAACC TCCTGGATCT GAAAAACCCC      360
TTCTTTAGAT ACACGGGCAC AACGCCCTCA CCCCCACCCG GCTCCCACTA CACATCTCCC      420
TCGGAAAACA TGTGGAACAC GGGCAGCACC TACAACCTCA GCAGCGGGAT GGCCGTGGCA      480
GGGATGCCGA CCACCAGACT CGAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

```

GAATTCGGCC AAAGAGGCCT ACATTCAATCA AGTCATCCAA CTTCTATAGT CAAAGCAGGA      60
TCATGTGGCG AAGCATATGC TCCACAAGGG TGGATAGCTT TTTTCATGGA ATTCTCGAG      119

```

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

```

GAATTCGGCC AAAGAGGCCT AAAGAGAGTG GAGGAGGAGG ACAAGATTGA TACTATGAGA      60
GTTGGAGGAC ATAATTCATG GATCATAGCT CCAGAAGTGA AAAGGGAGGA AATGTAGACA      120
GAGGAAGGCA TTAGCCATTG AGAAGAATAG GGACATATTT TCTTTACTCT CTTGTGAGAG      180
GAAGATAGCT GGGGGAGTAT AGACAAGTTG TAAGAATGAA GGAAGGAAGG CAAGAGCAGA      240
CTTGTCGGAT GAATTTTATT TTCTCTATGA AGTTTGAGAA TTAAACTTTA TGCTGAGAAG      300
GAGGGCAGGA GAGACTGTAT ATGGAATGTA AGGTTTGGGA TAACCAATGT AAGTTTGGG      360
AATGAGAAAG CCACCTAGGG ATGAGGAAAA AATATTTAAA ATTTTGTATC CACTGAAAAT      420
TCTTCAACAG TGTAAAATGA AGCATGCTCA ACTGGAAATG GTCATATATC TAAAAGAAAA      480
TGGATTATT TTGTTATTTT TCTCTATATT TGTAATATT TACAGTAAGC ATGTATTACC      540
TTTATAGTGA AAAAGTGTCA TTTTCTTACA TTGGTCAATT TTTTGTATT AAATTTTCATG      600
CTTGTTTTTA ATTGTTTCTT GTGTGTATGA TTGCAATATC AGGTATTGTA TGTGGTGATG      660
TGTGTGATTC AGAAGTCAGA AGACTTAAGT TCCGACACCC CTCGAG                                         706

```

(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

```
GAATTCGGCC AAAGAGGCCT AGGATTCAAA TTATTCTGAC AGACCTGTGT GGCAGTTCAG      60
GCTGATAGCT GGAGTTTCTT GTCTTTTCTT ACATGGCCTT TCATCTTCCA AGAGTTAGAC      120
TATGATTCTT CACATCATGA TGGCTTAGGG TCCCAAAAAG AAAAGAGTAG AACTTGCAAT      180
ACCTCTTAAG CCCTATGCCC AAGAACTCAT ACAGTGATAC TTCTGCCACC TTGTGTTAGT      240
CAAAGCAAGT CACAAGGCCA GCCAGATTCA AAAGAATGGA AAAATAGACT CAATTCCTG      300
GTGAGAAGTA GCAAGGTCAC ATTGCAAAGG AGTCTGGACA TGGGAAGGAG TTAATCATT      360
GTGGCCTTTA TAATAATCTT CCACAAATGC CTGTAATTTG GGCAGTGTGC TTAGTACTGG      420
TGATAGAAGA TAAGTAGCTT ATTTCAGTAT CTTAATTTTG TTTTATATAT TTGATAATTT      480
TATGATGCAG GTTCACTGTG CACTGGTATC AATCCCAGGG GAGGACTGTA AACACCTTGC      540
CAATACTGTG TACCAGTA.C AATCCACTGG CATGAGTCTG GTGAGACAGA ACACACAATA      600
AGTTTAGGGA AGCAACTTTA TTACTCACAG ACAGGCAGCA AGGGACTCGA G      651
```

(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 700 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

```
GAATTCGGCC AAAGAGGCCT AAAAAGATGA AAGGACCAAT CAAAGATTTA ATTAAAGCTA      60
AAGGGAAAGA TTTAGAGACA GAGAATGAAG AAAGAAATTC TAAGTTGGTG GTGGACAAAC      120
CAGAACAGAC AGTGAAGACC TTTCCACTGC CAGCTGTTGG TTTGGAAAGA GCAGCTACTA      180
CAAAGGCAGA TAAAGACATC AAGAATCCAA TCCAACCATC CTTCAAAATG TTAATAAATA      240
CTAAACCAAT GACTACTTTC CAAGAAGAAA CCAAGGCTCA GTTTTACGCA TCAGAGAAAA      300
CCCTCCTAAA AGAGAAGCTG CCAAGATTT GCCTAAATCA GGAGAAAGTC GATGTAATCC      360
TTCAGAAGCT GGAGCGTCTT TACTGGTTGG CTCAATAGAA CCTTCTTTGT CAAATCAAGA      420
TAGAAAATAT TCCTCAATTC TACCTAATGA TGTACAAACT ACCTCTGGTG ATCTCAAATT      480
GGACAAAATT GATCCCCCAA GACAGGAAAT TCTAGTAAAA TTACTAGATG TGCCTACTGG      540
TGATTGTCTT ATTTCTCCAA AGAATGTCAG TGATGGGGTT AAAAGGGTAA GAACATTATT      600
AAGCAATGAG AGAGATTCCA AAGGCAGGGA TCACCTCTCA GGAGTCCCTA CTGATGTTAC      660
AGTTACTGAG ACTCCAGAAA AGAACACAGA ATCCCTCGAG      700
```

(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 378 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

```
GAATTCGGCC AAAGAGGCCT AGGGGTGGTG GAGGCGTGGA CCCAACGGTG ACCGTCGGGA      60
TGGAGCAAGG GCAAGGAGAG GCTCTGGCCC AGACACAGCT TGGAAAAGCT CATCTCCCTC      120
TGGGGTTTAA AAACCTCAAAG CAAACGGAGC AAGCCTGGCG GCCCTGGGGA TGGGCGAGGG      180
```

```

CCTCTACCTC ACTGTGATCT TCGACCTGGC GACACAGGAC AGCCACACAG AAGCACGCCA    240
ACACACTTAA AGCTTTGCTC CAACTAAATC ATTTAGTTTC CCTTGAAGAA ATAAGTAAAA    300
AAAAAAACAA CTGCTGACAT CTATGTCTGT AGCTCGATT TACAGTCTGC TCTTTGTGAG    360
AAAGGAAAAT CACTCGAG                                     378

```

## (2) INFORMATION FOR SEQ ID NO:928:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 426 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

```

GAATTCGGCC AAAGAGGCCT AATATTTTAC ATTTCTCTTT TCTAAAAGTG TAAATTTTTC    60
ACTTTAAAT GAAGCAAGAA TTAATAAAT AGAACAAATA CCATATATCA TCACAGAGTC    120
AATATATTAT GGTCTGTTT TGACCAAGTG TTGCATTGTA TTTGTGTTAC CAGAAGTCCA    180
GGGCTTTCTA TGGCTACATG GTCAGTGCAT GCTCAGACAG CTGTTAAAT CAAACCTTC    240
ACTGTGCTGG GTCACCTGGT AACTACTGTC TATCTCACAA GTGCATTCTG CTGACATTCA    300
AGGGTTAAAC TGGTTTCTAG TAAATACTGT GCTTTAAAGT AGTACATACT GTGAGCTGTG    360
TTATTAGAAA CCTGCTTGTC CTTGTGTCTG AAAATAAGGA GGAACACTCT CGCACCAAT    420
CTCGAG                                     426

```

## (2) INFORMATION FOR SEQ ID NO:929:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

```

GAATTCGGCC AAAGAGGCCT AGGTAAATGT TAGTGGAATA TTTTATGAGT ATATGCTGAA    60
AGGAGAGATT AGTTCACATG AACTCAATAA TGTTCAGAT AATGAAATGC TTAGAAAGGT    120
TACTTTTGAT CCAGAAGTAT TTTTCAACAT ATTACTTCCT CCTATCATAT TTTATGCAGG    180
TTATAGCCTG AAAAGGAGAC ATTTTTCG AAATCTTGGG TCTATCCTAG CATACGCTTT    240
TCTTGAACA GCAATTTCTT GTTTCGTTAT TGGGTCAATA ATGTATGGCT GTGTAACGCT    300
GATGAAGGTA ACGGACAAC TCGAG                                     325

```

## (2) INFORMATION FOR SEQ ID NO:930:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

```

GAATTCGGCC AAAGAGGCCT ATGGACACCC TGTGCCCCAA GCCGATGGCC CCACCCAGCA    60
GCATCAGCAC AGNTGCCCCC CTTCTCCGCA GAGCAGGCTC TCCTTTACGG GACTCTCCTC    120

```

```

TTCCTCCCA CCTGATGCGC ATCAGCAGCC ACGGGCCTGG CCCTTGAATC TTGTCTAACT    180
GCACTCGCTG CCTGGTGGCC TCATCCCACC CCAAGACCAC TGCCTGATG GCTCCAACCC    240
CAACTTCTCC CTGCACTCAG CTTATGAATA CGACGGCCCT CATTGCATCC ATGCAGAGAC    300
CTCAGAGGCA GCTCAGCTCA GTGCTCAGCG TGGCACTCGG GGCTTCACAC TTCCCCCGT    360
GTCCTGTCTG AGAAACTGT GACACCATCA ACCCAACTAA CTCGAG                      406

```

## (2) INFORMATION FOR SEQ ID NO:931:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

```

GAATTCGGCC TCATGGCCTA CCAGACTGTA AACATTCCAG GTCCTGAAAA AGTGTGGGAC    60
CAGTCTCCTA CTGTTATGTT CTCCAGTTTT AAAAATGTAA AATCAGTTGA AACACTCGAT    120
CAGAAGGCAG ATGAAGTCCT TGACTGTCAG AGTAACCAAA ACAGACCAGA TGAATGCAAA    180
AGTGAAGGTC AGTCAGCCAA GGAGATGCTA AGTAGTGACC AGAGAGAGAC TGTCACCGGA    240
CTCGAG                      246

```

## (2) INFORMATION FOR SEQ ID NO:932:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

```

GAATTCGGCC TTCATGGCCT ACTCCATGTT CACGCCAATT TCCCCTAGTC CAAGTTTTTT    60
CTTTGCTGAT TCCTTTGTCC ATGTGTGCTT TGAGCCTCTC TCATCTTGTC TTTCTCCTT    120
TCCTAGGAGC AGCTCCTGAA GCAGCAGCAG CAGCACCAGT GGCAGCAGCA TCAACAGGGC    180
TCTGCCCCTC CTACCCCACT GCCCCCATCA CCACCACAGC CTGTGACCCT GGGGGCTGTG    240
CCAGCTCCAC AGGCTCCACC CCCGCCCCAC AACTCGAG                      278

```

## (2) INFORMATION FOR SEQ ID NO:933:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

```

GAATTCGGCC TTCATGGCCT ACGAGTGCGA CCAGCCAGAT GAGCGCCCGG TCCTGGTGAA    60
GAGCATTAC TACCTCTACT TCTCCATGAT CCTGTCCACG GTCACCCCTCA TCACTGTCTC    120
CACCGTGAGC TGGTTCACAG AGCCACCCTC CAAGGAGATG GTCAGCCACC TGACCTGGTT    180
TACTCGTCAC GACCCCGTGG TCCAGAAGGA ACAAGCACCA CCAGCAGCTC CCTTGTCTCT    240
TACCCTCTCT CAGAACGGGA TGCCAGAGGC CAGCAGCAGC AGCAGCGTCC AGTTCGAGAT    300

```

GGTTCAAGAA AACACGTCTA AAACCCACAG CTGTGACATG ACCCCAAAGC AGTCCAAAGT 360  
 GGTGAAGGCC ATCCTGTGGC TCTGTGGAAT ACAGGAGAAG GGCAAGGAAG AGTCCCGGC 420  
 C 421

## (2) INFORMATION FOR SEQ ID NO:934:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

GAATTCGGCC AAAGAGGCCT AAAATAGCAA AGATGGAACA TGGACCTAAA GCAGTGACTA 60  
 TTGCAAATTC TCCATCAAAG CCTTCAGAAA AGGATTCTGT AGTTCCCTT GAGTCCCAGA 120  
 AGACACCTGC TGACCCAAA CTGAAACTC TAAGTCAAAC CAAAAAAGC AAAGGATCTG 180  
 ATAGCTCACT CTCTGGTAAC AGTGATGGCG GAGAAGAATT TTGTGAAGAG GAGAAGGAAT 240  
 ATTTTGATGA TAGCACAGAA GAAAGGTTT ACAAGCAGTC TTCCATGTCT GAAGATAGTG 300  
 ATAGCGGTGA CGACTTCTTC ATTGGGAAAG TCAGACGGAC ACGAAAGAAG GAAAGTAGTT 360  
 GTCAATCTTC AGTTAAGGAA CAAAACCAC TAGAAAAAGT GTTCTTAAA GAAGATACAG 420  
 GTGAAACTCA TGGGGATACA ACTCTCGAG 449

## (2) INFORMATION FOR SEQ ID NO:935:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

GAATTCGGCC AAAGAGGCCT AAAAATAGTG ATTTTGTGAC TATCTATAGA TATTAGTTGG 60  
 CATTCTACTG TAAGGAAAC TTCTTTTCT CCTGTACTTA TTCATCGTCC CCCAGGAATC 120  
 AGTCATTTT CCAAGGAGAC CTAGTTCCTT TTGTGAGGA GTTGTTTTGA GTTCATTTG 180  
 AAGTTCATTT GAAGTTTGA GTTCATTTA CTATAATCTG CCTAGGTGTG ATTTTCTTTT 240  
 TATTTATTCT GCTTAGGATT TGCAGAGATT TTTTGAACC TGTGGCTTGA TGTCCATCAC 300  
 TTTTGAAAT TTCTCAGCCA GCATAGTATC TGCAGACTGT GTGTCTGTTC CATTTTCTCT 360  
 CTTTCTCCT TGTAGGACTT CATTACAAG GATGTTAGAA CTTTTTACCA TGGCTCTCGA 420  
 G 421

## (2) INFORMATION FOR SEQ ID NO:936:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GAATTCGGCC AAAGAGGCCT ACAGGTCTAC TGGTAATGAT TTCCTTTACC TTCTAATTAT 60

```

ATAGAAATGT CATAATTTCT CCTTTATTCT TGAATGATAG TTTTGTGGGA TATAGACTTG      120
CTGGATATAG AATTACTGGA TATAGAATTG CCAGATATAA AATTCTTGGT TCAAAGTTTT      180
TTTTCTTTGA GGAATTGAA TGTCATCCCA CTGTCTTCTG GCCTCCATAG TTCTCATAA      240
TAAATCAGCT GTTAATCTTC ATTAAGTTTC CTCGTACAC GAAGAGTCAC TTGTCTCTTG      300
CTGCTTTCAA ATTTTCTCA TTTGCTTTGG GTTTTCACAC TTTAATTATA TGCCTTTCTA      360
TGTGGATCTC TTTGAGTTTA TCCTGCTTGG AGTTCATGA GCCTTTTGCA TCTGTATAT      420
AATTTCTTTC ATCAGATTG GAGATGTTT TGGCATTAT TTCCTCAAAG TTCTTCTGC      480
TTCTTCTCT CCTTCTCCTT CTGGGTCACC ACAATGCATA TGTTGGTCTA CTGTATGATG      540
TCTCACAGGT TCCTTAGACT CTGTTTACTT TTCTTCATAT TTTTCTTT CTGTTTCTTA      600
AATTTGATA ATTTTGGTTG TCTTATATTC AAGTTTGCTG ATCTCGAG      648

```

## (2) INFORMATION FOR SEQ ID NO:937:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

```

GAATTCGGCC AAAGAGGCCT AGAGGATGGG AAGCTTGGGG AGAGAAGATA CTGAAATGCT      60
AGAAACTGAG CCAGTAGAGG ATGGGAAGCT TGGGAGAGA GGACATGAGG AAGGATTTCT      120
GAACAACAGT GGGGAGTTCC TCTTAAACAA GCAGCTCGAG      160

```

## (2) INFORMATION FOR SEQ ID NO:938:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

```

GAATTCGGCC AAAGAGGCCT AGAAAACTC AGGAAAGAAA TTGCAGACTT CGAACAACAG      60
AAAGCAAAG AATTAGCTCG AATAGAAGAG TTTAAAAAGG AGGAGATGAG GAAGCTACAA      120
AAGGAACGTA AAGTTTTTGA AAAGTATACT ACAGCTGCAA GAACTTTTCC AGATAAAAAG      180
GAACGTGAAG AAATACAGAC TTTAAAACAG CAAATAGCAG ATTTACGGGA AGATTTGAAA      240
AGAAAGGAGA CCAAATGGTC AAGTACACAC AGCCGTCTCA GAAGCCAGAT ACAAATGTTA      300
GTCAGAGAGA ACACAGACCT CCGGGAAGAA ATAAAAGTGA TGGAAAGATT CCGACTGGAT      360
GCCTGGAAGA GAGCAGAAGC CATAGAGAGC AGCCTCGAG      399

```

## (2) INFORMATION FOR SEQ ID NO:939:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

|             |            |            |            |            |            |     |
|-------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGGC  | AAAGAGGCTA | GAAGCATCGA | AAGCGTTGGA | GAGGTGTTAC | CGGTAACGGC | 60  |
| GGCGAGAAGG  | GTGTTCCCGA | ACTAGAGTGG | GGCATACATA | ATCTTGCTGC | TATGCTTCGA | 120 |
| AGCTGTAGTC  | TGAATCAACC | TAAGTTTAA  | ACAGAAGGTG | AACCTCTGAG | ATAGAAAATC | 180 |
| AAGTATATTT  | TAAAAGAAGG | GATGTGGGAT | CAAGGAGGAC | AGCCTTGGCA | GCAGTGGCCC | 240 |
| TTGAACCAGC  | AACAATGGAT | GCAGTCATTC | CAGCACCAAC | AGGATCCAAG | CCAGATTGAT | 300 |
| TGGGCTGCAT  | TGGCCCAAGC | TTGGATTGCC | CAAAGAGAAG | CTTCAGGACA | GCAAAGCATG | 360 |
| GTAGAACAAAC | CACCAGGAAT | GATGCCAAAT | GGACAAGATA | TGTCTACAAT | GGAATCTGGT | 420 |
| CCAAACAATC  | ATGGGAATTT | CCAAGGGGAT | TCAAACCTCA | ACAGAATGTG | GCAACCAGAA | 480 |
| TGGGAATGC   | ATCAGCAACC | CCCACACCCC | CCCCTCGAG  |            |            | 519 |

## (2) INFORMATION FOR SEQ ID NO:940:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AAGAAATTAT | ACCATTTTAT | GGAATGTCAA | GCTACATCAC | 60  |
| CCGAGAAGAC | CAGTACAGCA | AGCCTCCGCA | CAAAAACTG  | AAAGACCGCC | AGATCGATCG | 120 |
| CCAGAACCGC | CTCAACAGCC | CTCCTTCTTC | TATCTACAAA | AGCAGCTGCA | CAACAGTATA | 180 |
| CAATGGCTAT | GGGAAGGGCC | ATAGTGGTGG | AAGTGGCGGA | GGCGGCAGCG | GTAGTGGTCC | 240 |
| CGGAATTAAG | AAAACAGAAG | CGCTCGAG   |            |            |            | 268 |

## (2) INFORMATION FOR SEQ ID NO:941:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AAGCCTCGCC | TTACACTTAA | GTGCACCCGA | TCCTGCCTCT | 60  |
| GGCATCTCAC | AAACGTCACT | CCCTGGAACA | AATTGTGAA  | GGCCTCCAGA | CCACAGTGTC | 120 |
| CTCATCTGTA | AAATGGGGGT | AGTAGTAATC | CTTGCCTCAT | AAAGTTCTTG | GCAAGGATTA | 180 |
| GATGAGCGAG | CATGTGAGTT | TGGCCTCCGT | TAAACACTC  | CATAAAGTTT | CCTTTTAGGA | 240 |
| TAACAGCAGG | CCGTTTTAGA | ACCTTCCAGA | GGTTACTTAT | TCAGATATCC | TTAGGTGACG | 300 |
| ATTGGGAAGC | TGCCGTTTCT | TGAGAGCCTC | CTGGGTGACA | GATGGAGAGT | GGCCCTGGCG | 360 |
| TGACCCCTGA | CCCTATCCTT | GAGGCTTTCC | TGCCCGTCTC | CTGCCTCGAA | TGTGCTCCGC | 420 |
| AGCACATGGA | TCAGGATGGG | GAAGGGGCTG | TGTCACTGGA | TACCTTCGGC | CCCTGCCCAC | 480 |
| GTCTAGGGCC | TGTGAAAACG | AGGAGGGACA | GCAAAGAAAT | GGGGAAAGGC | TCGAG      | 535 |

## (2) INFORMATION FOR SEQ ID NO:942:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AAAATTGTTA | ATTCTAGTCA | CCCTGCAGTG | CTATAGAACA | 60  |
| CTGGAACTTA | TTCTTCCTAT | ATCACCGTAT | TTTTGTATCT | ATTAACAAAC | CTCTCCATAT | 120 |
| CCTCCCTCCC | TCCTACCTT  | CCCAACCTT  | GGTAATCACT | ATTCTCCTCT | CTACTTCTAT | 180 |
| GAGATCAATG | TCTTTATTTA | CTCGAAGTAC | TCTTAAAAGT | TTAGGACTTA | AGTATTTGAA | 240 |
| GAAATTCAC  | TGCTTTTGT  | TTTATTCTA  | CTCAATACTT | TTTAATATAA | AGATTTACAG | 300 |
| TCCTCCCTTA | CTCGAG     |            |            |            |            | 316 |

## (2) INFORMATION FOR SEQ ID NO:943:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACAAACTCAA | GATGCCCGAG | TGGATTGGAG | GCGAGAGCGA | 60  |
| GCTCAGGAAG | TTTCTAAAC  | ATCATTGCG  | AGGAAAGAAC | TGTGAACCTC | TGCTGGTGCT | 120 |
| ACCAGAAGAG | GTAAGGCTC  | ATCAGAGTTG | GAGGACCGAT | GTGTAACAGT | TCTGCCCAAC | 180 |
| CTCCCTCTCG | CCTCAGCCCC | TTCAGTCTCT | TGTGACGTGC | TGTGGCCTCT | ACAGTGGGTC | 240 |
| TGCCCTTGCC | ACTTCCCCAA | ACATCTCATC | AAGTTTTTCC | CCTTCAGATC | TGACAGTGCA | 300 |
| ATAGGACAGA | CGTGTGGACT | GTTATAAGAA | CTACTCAGTG | TTTGTTCCT  | GGGCAAACTC | 360 |
| GAG        |            |            |            |            |            | 363 |

## (2) INFORMATION FOR SEQ ID NO:944:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACTCTGACAG | TGTTTCTGAC | CTTTAGCATT | TCTTTTGTAT  | 60  |
| TCTTTCTTAG | AATTCTCATC | TTCTGCTTAT | ATACCTGTCT | ATTCTTGCAT | GCTGTCTACG  | 120 |
| TTTCCCATGA | GAGTCTTAG  | CACATTAATC | ATGGTTGTTT | TACATTACAC | GTCTGGTAAT  | 180 |
| TCCAGCATCC | CTGCCACATC | TGAATCTAGT | TCTGATGCTT | GCCCTGTCTC | TTCAAACCTCT | 240 |
| GTTTTTTTGC | CTTATAATCT | TTTGTGAAA  | GCCGAACATG | ATTCTGTAC  | TGGCTCTTCT  | 300 |
| GGAGGCTTCT | GCCCTGTTCT | CGAG       |            |            |             | 324 |

## (2) INFORMATION FOR SEQ ID NO:945:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 712 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

```

GAATTCGGCC AAAGAGGCCT ACAGATGACT TCATTTCTCT TGGATTCCAC TTTCTCACGT      60
GTCAGAAATGG GAGAGGAAGG GAGGTGTTGG GATAAGTTTC AGTTCCACTG TTTGTACTTC      120
TCGTCTGGCT AACACCCATG TGGCAAATAG GTTTCATCAT TTGTTTCAGC TTAGATTGTG      180
TGACAGCGGT TTCCTGGAGT GCTGTCTTGA GAACGATTCT GAGGAGGCTC AGCAAGAAAG      240
AGTGTTCAG TTGATTGGGT GTGCTGTGCA TGGAGAAGGA AGTAAGGAGT GGGCAGTGCT      300
AGCAAAATTC CCGGGGCACT TCTGTCCATT ATCTCAATAC CTGGGGTTGA CATTTCTGT      360
CTCAGATCAG GAGTCCTGAC TACCCTGCCT CTGACCACTC GAACTGAGTG CTGCTTAGCT      420
GTATCGTAGA CACCGCCTGT TTGTGAACAG ACACCCCTGCT TCTTGATAAC ACAAGGCCA      480
GCAGGGTCCA CTGCTGTGTG GAATGGCCTT CGGTCATTTC TGCCCAGAGC ATAGAGGTCA      540
TTTTCATAA TAACATAACT CTCCTTTTGA TTGAAAGTGT TAAATGTTT CTCCTAAAAG      600
CACTTATTTT TTAGGCTCGT TCTTCAGATT TGCCCCATAT CCTAAGCAAA ATGCCTTCAA      660
TATGAAGTGG ATATTGCTTG ACCGTAGGGA GCTTGTCAT ACTGTACTCG AG              712

```

## (2) INFORMATION FOR SEQ ID NO:946:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

```

GAATTCGGCC TTCATGGCCT AGTCTTGAAG GATAAGACTT GCCCAAGTGG ATAAGGGGCG      60
AAAGGCATCC CAAGAGGAGA CAGTAACGTG TGTATAAATG AACGAAGGCG TGAATAGGA      120
TGGAGTGTTC TGAGGAACCA CAAGTAGCCT TCTCTGAGTA AGAGCATAGG TTTGTGAGGA      180
GGACCTAGTG TTGTTTGAAA AAAGAGAGTG ATCAATGGAA GATGAGATAT CAAGACAGGA      240
GAACCAAGGA AGAAAAAGCA GAGGACAGCT GGAATGAATC AAACCGAAGA ACCAGGATCC      300
TCGAG                                         305

```

## (2) INFORMATION FOR SEQ ID NO:947:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

```

GGGTTTTGTT AATGAAAGT TTAAGTAAAT TATATTGTAA TAAAAAGGTA GATAAACCAT      60
TGTACAACAG TATTCTAGGC CGCCAACAAA AGTGTGACAG ACACACTAAA AGCCCTCCAA      120
CTTAACTTG TAACGTAGCT TCATTCTCAA AGCTGACTCC TTTTCTTTCT TTTTCTTTT      180
CTTGAGTGTA GTACAGTTAA AATTTCAAAC AGCTCCTTGA CACTGCTTTT CATGTTCAAA      240
CCAGCCATTG TGTGTACTT TGGTAAAGGA CCTCTTCCCC TTCCTCCCCT ACACATACAG      300
ATACACCCAC CATAACTCGA G                                         321

```

## (2) INFORMATION FOR SEQ ID NO:948:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

```

GAATTCGGCC TTCATGGCCT ACAAAGGCCA ACAAACAAGA TTAACATGGA ATTATAAAAA    60
TCACTCAATC CAAAATAAGG CAGAAGAAGT GGAAAAGGGA GATGAAGATC AGATGGAACA    120
AAGAATATTA CTAGAAATGA CTATGTTTAA TAATGCAAAA TAGTTCAGTA CAGGAGAAAG    180
ATACAATAAT TTGAGTGCAT ATGAACCTAA AAGAGAATTT CAAAATATAT GAAGCAAAAA    240
TTGACAGAAC CAAAAGGCCA ACAAACAAGA TTAACATGGA ATTATAAAAA TCACTCAATC    300
CAATATCTCG AG                                     312

```

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGGA GCCTCAAGAA AAATTAGCAG    60
AGGAAAATAA TAGGTAGTTA CTATTTAGGG TAAACTAAAC TGTTCTAAGG AATAGAAAAT    120
AAAAATTCCA TGTCTTCAA AATAATTCTT CCTCTCAAT CTCTCTGAAT ATCTCATAAG    180
AGTATTTCAGG CCACAGAAAT AACTACCATT TAGCCACTCA GAGGCTTATA GTAGTTCTAC    240
TAACTTTAAC ATTTGGCAAC CAAAATTACT CTAAGAATCA TCACCTTCGA G                291

```

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

```

GAATTCGGCC TTCATGGCCT AGATGGGCAT TCTGTTTATC TTAGTAGTAG TACGCAGGGT    60
ATGTTGAAAT CTCCAAGTGT GATGGTGGAC CTGTCAACTT CTCCCTGTGG TTTTATCAGT    120
TTTTCCTGGG TATTTGAGG CTATTCTGAT AGGTACATAA AATACAAAAA TTGCTATATC    180
CTCCTAATTA AACTTTATTA TCAAATGTT ACTAATGCTT TCTGTTCTTA GGCCATGAAG    240

```

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

```

GAATTCGGCC TTCATGGGCT AGATCTGAGC TCACTGCAAC CTCTGCCTCC AGGGTGCAAG      60
CCATTCTCCT GCCTCAGCTT CCCAAGTAGC TGAGACTACA GGCGTGTGCC ACCACGTTGG      120
CTAATTTTGG TATTTTGTAGT AGCTTTTTTT TTTAAACCCT GAGTGTGAGG TGTGAGGTAG      180
TAGAAGAAAG GTAGTGTGTG TGACAGCTTG TGAGTACTTA ACTAATTCTT GTTGCAATCA      240
CTATAATATG GTAGTGTGTG ATACATTATG AGGCAATTAG GAATAGGGAA CAGAATCAGC      300
AGATACTAAC GGAGTTAGAG ATGTTTGCTG AAGTCATGGA AAGCCATCAT TACTTTTTTC      360
TTCCTTCCTC ATAAGGCCTT AGTGGGTGTG GCGTTCAGCT CGAG                        404

```

## (2) INFORMATION FOR SEQ ID NO:952:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

```

GAATTGGCCT TCATGGCCTA GAAAAATCAT GTGGGAAAAC CACTGCTGAA AATGGATTTA      60
AATTCAGAAC AGGCGGAACA ACTGGAAAGA ATCAATGATG CTCTTCCTG TGAATATGAG      120
TGCCGCCGAC GAATGTTAAT GAAACGATTA GATGTGACTG TACAGTCTTT TGGATGGTCT      180
GATAGAGCAA AGGTAAAAAC AGATGATATA GCAAGAATTT ATCAGCCTAA GCGTTATGCT      240
TTGTCACCCA AGACAACGAT TACAATGGCA CATCTACTTG CTGCTCGTGA AGATCTATCC      300
AAGATCATTG GGACAAGTAG TGGCACCAGC CGGGAGAAGA CCGCATGTGC CATTAATAAG      360
GTGCTGATGG GAAGGGCTCG AG                                     382

```

## (2) INFORMATION FOR SEQ ID NO:953:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

```

GAATTCGGCC TTCATGGCCT AGTCCCTCTT CCACTGCATT TCGGCTTCAT ACATGCACAT      60
GATGTCCTCC TCCTTGCACT CAGTGATGTC TGGCACGCGG CGGTACTGCC GGTGGTAGTA      120
GTAATACCTG TTCTTTGCGT GCTGCCGCTC TATAAATTCT CTCACGAGG TCACGGGTCG      180
GTCCACGATG AGGTCGAACG CTTTCATCAT GTAGACGATG GGATTGGGCT GCACCGGCGT      240
GCGGCGCGGG GGCTCAGGCT CGCTCGAG                                     268

```

## (2) INFORMATION FOR SEQ ID NO:954:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

```

GAATTCGGCT TCATGGCCTA AAGATTCTGC TCTTTATACA CAGAACTTGG TATAGAGTTC      60

```

|   |     |
|---|-----|
| TGGAATGAGG AAGTGTGAGG AGGGAATCAG TGCCTCTCGG AAGTCGTTTT AATTAGAATG | 120 |
| TGATTTTTTT TTCTTAAACG TGTCTTCATT GGCTCCCAGA TTTGCCGTAG AAACCAAGCA | 180 |
| AACTGGGTGC TAAACAGAA AGGCCATAG ATTGTACTTT TTGAGCTGTT TGAATTTGTA   | 240 |
| TACCATATGC ACAACTCGAG   | 260 |

## (2) INFORMATION FOR SEQ ID NO:955:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 129 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AATCCGAGTG TTTCGCGCAC GTCCTAAGCT GACAGTCCCT | 60  |
| CTGGACAGAG TCCCTGGAGT GGAGTCACTG CTCCTTGTCT TTTTTCATA ACATACACTC  | 120 |
| ACCCGTATG   | 129 |

## (2) INFORMATION FOR SEQ ID NO:956:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 404 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

|   |     |
|---|-----|
| GGCTAAACAT GGAAATGAAA GACTGATACT TGCTACCACA AAAANANACT TAAGCACATA | 60  |
| GATCATAGAC AGTATAAAGC AATTAGACAA TGAAGTCTAC AAAACAACCA GTTAACAACA | 120 |
| CAATGAGAGT ATCAAAATCT TACATGTCAA TACTAACCAT GAATATAAAT GATCTAAGCC | 180 |
| CCCCACTTAA AAAGCATAGA GTGGCAACT GGATAAAGAG ATAAGACCCA ACTGCTGTCT  | 240 |
| GCCTTTGAGA GACCCATCTT GCATGTAGTG ACACCCACAA GCTGAAAGTA ATGAGATGGA | 300 |
| GAAAGATCTA TCATGCAAAA GGAAAACAAA AAAGAGCAAG TATCACTATT CTTATATCAG | 360 |
| ATAAGACAGA TTTTAAACCA ACAACTATCA AGAAGAACCT CGAG                  | 404 |

## (2) INFORMATION FOR SEQ ID NO:957:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 283 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGACTCTCTT TATACAATTC ATCAAGGTTA AACAAAACAT | 60  |
| AAAATTCCTT TAAAAATAGG GTAATAAAT AGATGAAATT TGTATCACTC AATTTGGTGA  | 120 |
| TACTAGTAAA AACTATAGTT CATATTTATA TACAAATAAT ACAGTCTGTA AAAACAGTCT | 180 |
| TAGAATTTAA ATAAGCTATC TAAACGTGTT AAAATTTTAA ATCAGGACCT GATTTGTTTT | 240 |
| GCTTTCCATT AAATGTCACA TTGAATTCTA GACCTGCCTC GAG                   | 283 |

## (2) INFORMATION FOR SEQ ID NO:958:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

```
CTCGAGGACC TGGTCGTGAC CAACTATAAG ATGGGGGGGC GACATTGCCA ATGGGGTACT    60
TCGGTCCTTG GTGGACGCAT CTAGCTCAGG TGTGTCAGTA CTGAGCCTGT GTGAGAAAGG    120
TGATGCCCGTG ATTATGCAAG AACAGGGGAA AATCTTCAAG AAAGAAAAAG AGATGAAGAA    180
ACGTATTGCT TTTCCACCA GCATTTTGGT AAATAACTGT GTATGTCACT TCTCCCCTTT    240
GAAGAGAGAC CAGGATTATA TTCTCAAGGA AGGTGACTTG GTAAAAATTA GGCCTCTTTG    300
GCCGAATTC                                     309
```

## (2) INFORMATION FOR SEQ ID NO:959:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

```
GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGACTAC TGCAAGTGCT    60
TAAAGGCATT ATTTCATAGA CCTTACAACT ACCCATATAA CATTATTATC TTCATTTTAC    120
AAATGAGGAT AATAATGTTA TATCTCGAG                                     149
```

## (2) INFORMATION FOR SEQ ID NO:960:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

```
GAATTCGGCC AAAGAGGCCT ACACCGTAAT ACTATAATAC TATATAATCT GTTTGTTAAT    60
TTTCTGAGAA TAATAACTCA ATGGAGTAAC TCTTTAATAG GCATCTTTTC CTTATAAAAA    120
ATATTGTAGA TTGGCTCTCT GCAAGCTAAT TTCTTTTATA TGGTTAATAT TTTAGTGTAC    180
ATTAAAGAGCT TAGAGTTCTT TTTGTAATCA AGCTTGCTAC AGAAGCTGTG CTTTATTAT    240
TTCATAGTAA TTTCCTCTAG TGGGTCATTG TATAAACCCCT GATCATTTT GTATGTCTAT    300
TCCTTTTCTT GCGAAGTGGG CAGCTTGTTT AGCCATGGTG TTTTGGCTTC AATAGTGAGG    360
TCTCTATTG GGAATCTCTG AATTTCACAG GAATGAGTAG AACTATATTT AACATGAAA    420
AAATAGTAT TAGATTTTAG GGCAGCTGGC TCGAG                                     455
```

## (2) INFORMATION FOR SEQ ID NO:961:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

```
GAATTCGGCC AAAGAGGCCT ACCCTGTCTT TATGCTCCAA TGCTTCTTTC TCCAGATATG      60
AAAGGAGATG CTCTCTATCA AATGGCCCTG TGGTGGACTT TGATGTCTGG TTCTTCTGCC      120
GGAACCCCTG TGGCTTTTTC CTGTAGCTCC ACATTCCTGT GCATTGAGGG GTTAACATTA      180
GGCTGGGAAG ATGACAAAAC TCTCGAG                                     207
```

(2) INFORMATION FOR SEQ ID NO:962:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 247 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

```
GAATTCGGCC AAAGAGGCCT ACTGTAGTAT TTAAATATCT GTTACAGGTT TCCAAGGTGG      60
ACTTGAACAG ATGGCCTTAT ATTACCAAAA CTTTATATTT CTAGTTGTTT TTGTACTTTT      120
TTTGATACA AGCCGAACGT TTGTGCTTCC CGTGCATGCA GTCAAAGACT CAGCACAGGT      180
TTTAGAGGAA ATAGTCAAAC ATGAAGTAGG AAGCCAGGTG AGTCTCCTTT CTCCAGTGGA      240
TCTCGAG                                     247
```

(2) INFORMATION FOR SEQ ID NO:963:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 472 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

```
GAATTCGGCC AAAGAGGCCT ACAAGAACAT GAAACATCTG TGGTCTTCC TTCTCCTGGT      60
GGCAGCTCCC AGATGGGTCC TGTCCCAGGT GCAGCTGCAG GAGTCGGGCC CAGGACTGGT      120
GAAGCCTTCG GAGACCCTGT CCCTCACCTG CGCTGTCTCT GGTGGCTCCA TGAATAGTCA      180
CTACTGGAGC TGGGTCCGGC AGCCCCCAGG GAAGGGACTG GAGTGGATTG GATATATCTC      240
TGACAGGGGG AGCACCAACT ACAACCCCTC CCTCAGGAGT CAACTCACCA TATCACTAGA      300
AACGTCCAAG AACCAGTTCT CCCTGAATTT GTTCTCCGTG ACCGCTGCGG ACACCCCGGT      360
ATATTACTGT TCTCGTGGGA CATCCCCCCC CCCCTCCTAC TACTACTCCA TGGACGTCTG      420
GGGCAAGGGG ACCACGGTCA CCGTCTCCTC AGGGAGTGCA TCCACCCTCG AG          472
```

(2) INFORMATION FOR SEQ ID NO:964:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 303 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

```

GCTCGGCTCG CTGCAACCTC TGCCTCCCAG GTTCGAGCGA TCTTCCTGCC TCGGTCTCCC      60
AGGTAGCTGG GACTACTGGC GTGCGCGACC ACGCCCAGCT AATTTTTTGT ATTTTATAGT      120
GAGACGGGGT TTCACCATGT TGGCCAGGAT GGTCTCAATC TCTTGACCGC GTGATCTGCC      180
TGCCTCGGCC TCCCAAAGTG CTGGGATTAC AGGCTTGAGC CACCGCATCC AGCCAACATT      240
TTTCAAATAG AAAATCTGAA GCTAAATCA CCCCTAAAGG ACAAATAACA GGACTATCTC      300
GAG                                                                    303

```

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

```

GAATTCGGCC TTCATGGCCT ACTAGATTAT GGATTTTTTT ATTTCAATGG AAGTGAAGT      60
CAAAGATGCC AGAGTGGTAC AGTTCGAACA AACTGCTTGG ATTGTCTTGA TAGAACAAAT      120
AGTGTGCAGG CATTCTTGG CTTAGAGATG CTAGCTAAAC AGTTGGAAGC TCTTGGTTTA      180
GCTGAAAAGC CTCAGTTGGT GACTCGCTTT CAAGAAGTTT TTCGGTCAAT GTGGTCCGTG      240
AATGGTGATT CAATCAGTAA GATATATGCA GGAAACTCGA G                                                                    281

```

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

```

GAATTCGGCC TTCATGGCCT AGACGTGATG TGTGAGAGA AGAATGTTCT AGGCAGAGGC      60
AACAGCAGAT GCAAAGGTCT GAAGGGGAGA CAGACCGAGC TAGAAAAGCA TGGCACATCA      120
GTGATCTAAG TTCGTGTGGT TTCCTAAGGT TGGAACTTAG GGTGCAAACT GAGGATGGGC      180
AGATGAGGTG GAAGAGGAAG AGCAGACCCA GGTCACAAAG ATCTTTTGTG CTAAGGATTT      240
TTAAGCAGGT AGGAGGAGAG AGAATATGAG CCTTGGGATT TGAACGCTG TGGGTGTACA      300
GAAAAGAGA AACTCAACGA GAGGTTTAGG TTTAGGGACG TGGTAGGCTT TTGCAGTAAG      360
GGACAAGGAC AGAAGGCTCA TCTGAGGATG GGAGGGACAC TTTAGAGGCA AATCCATAGG      420
ATGCAGTGGC TGAACAGAAA AGGTGAATCT CGAG                                                                    454

```

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

```

GAATTCGGCC TTCATGGCCT AGTCATTTAA TTAACTTAG CAAAACCTCCA ATAGTGTAAG      60
TTAACAGATT TTGGAAACTG GTTTTAAGTA GATGTATTAT AACATAAAAC AAAGCTAGCC      120
ATTATCAAGT TATTTCCCTG TTAGCTATTT TTACAGCATG TGCATGTTAG GTAGTCATCG      180
TGAAAGCAAG AATCTTAAGT TAAATACATG TTTTTTTGT TTGTTTGTGTT TACTGCTGTG      240
CTGTATAATA CATGATGCTG TTAGCAGCGG AACGTATCAG AGACACGGCA CCAAAGTATG      300
TTACTGTCGG CGAAAACCTG AG

```

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

```

GAATTCGGCC TTCATGGCCT AGACTGCTGG CATATCCACC CCACCTGTGC TGCTGCCCCC      60
GCCAATCCAT CAGGGCAGCT CCGACTCCTG CAGCACCCAC CGCCCAGGAC GTCAGCTACT      120
CAGGTTTTCT GGCTGCTGGG GTTCCGCACG AATGGGCCCT TCTTTTGGGA AAATGCCAGG      180
GAAGGGGAAC GGCTGGGCTC GGGCGCCACA GCTTGTCCTT CCAGCCAGCA GGCACAGATG      240
TATGGCGCAG GAGGGACAAC TGGCCCCGTG GGCCAGCCCC AGAGAGACGG GCCCTTTCTT      300
TGGGACCCCTG GCCTCAGAGG CCTGCGTGTC ACAGCTCAGG GTCTGGCTGG GCAGGGGGCAA      360
AACCTGCCTT ATTTGCCAGA TGTCCCAGAA GTACACAGGA GCAGACGCAC CACTTCGATG      420
GCTATTTTAG GAGGCTGGTG ACAAGCAAGG CATGGTGGCA GGAAGCCAGG CCCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

```

CTCGAGGTCC CTGTCCTGCT CAGTTTCTCT TCAATGTGGA AGTCCTGGGA GGTCACTCTC      60
ATGAGAATAA GGTGCTGTAC TTTCACAGCC TTCTCAGACT TTTCTGAGGA TGGCCTTACA      120
CTTGCCAGCT AGTGGAGTGA GCAGAACTCC TCCTGGTTTC TGTGGCTGTT CTCAGAATGC      180
CCTAGTTCAC TTCCAGTAA TACTTTTTTG GGAACATTTT GTGTTTCTCA TTTTCTCAGG      240
TCCCCCAGGC ACACCATCTT TCCTCTGCTT CCTCTCACAC AGGTGCTGAT ACTGTGTAGG      300
TTTGGGGCTG TTGTTCTGGC CCACTCCCTG ATATTTTCTG GGTGTGTCAC CTAGTTTTCT      360
TAAAAGTATC ATCTACATGG TTTTGGTTTC ACTATCTATT CTGTCTTTAT TTGAACACTA      420
GGGGAAATTC ATTATGCCAA TCTCACACAT TGTGTGATTC CATTAGGCCA TGAAGGCCGA      480
ATTC

```

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGGCAAAATG AAAATACTTG TGGCATTTC   | 60  |
| ACCATCTTTG GGATACAATC TCATGGATAC GAGGTTTTTA ACATCATCAG  | 120 |
| AATGGTGGCA ATGTTTCAGGA GACAGTGACA ATTGATAATG AAAAAAATAC | 180 |
| AACATCCATG CAGGATCATG CTCTTCTACC ACAATTTTTG ACTATAAACA  | 240 |
| GCATCCAGGG TGCTCTCCCG AAGAGCCTGC TTTATCCTGA AGATGGACCA  | 300 |
| CCTCCTCTGA ACAATCTCCA ATGGTACATC TATGAGAAAC AGGCTCTGGA  | 360 |
| TCCAGCAAAT ACACCTGGGT CAAGTACAAC CCTCTGGAGT CTCTGATCAA  | 420 |
| TGGTTCCTGC TTGGGTCACC CATTGAGAAA CTCTGCAAAC ATATCCCTTT  | 480 |
| GAAGTGGTTG AAAACACACA TAATGTCGGT GCTGGAGGCT GTGCAAAGGC  | 540 |
| TGCACTCGAG  |     |

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 289 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AGCCAGTCTC AGCACTTAAA CAACCAGGTG | 60  |
| ATGTTCCAAA GAACAGAAGA GAGTATGGTT TGCAGATGGT ATATTGCCCA | 120 |
| TGCAGATACA ACAAATTAT CATCTGGAAG TAAAAGATGT TCTGAAGACT  | 180 |
| CTCACCTGAT GTGCCTATGG TAAGGAATTC AAAGAATACT TAATTGACTA | 240 |
| TATTCGTAG ATAATTCCTG GTGTGATTAT TAGAGTGCTT TTTCTCGAG   | 289 |

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 418 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AGAGCTTGGG AGGTTGAGGC TGCACTGAGC | 60  |
| ACCACTGTAC TCCAGCCTGG GTGACAGGGC AAGACTCTGT CTCAAAAAAC | 120 |
| ACAAAACTT TATTCCTAAA AAGTGCTGAC CCAGAGATAA GAAGCAAGCA  | 180 |
| AAAATGACAT CAGTGAGCTT GCTTTATGCA GGGTTGCCCC AAACCTTCAA | 240 |
| TCAAAATATC TGGAAAGCTT GGTGAGGCGA GCGGGGACTG TAACTCAGCA | 300 |
| GGTGAGACCC TTAGGGCAGC GGGTGCTACA CTGAACAAAG CGGTGAACAG | 360 |
| AGAGGGGGTT CTTGGCAGAT GACGCCAGCA GCTGACAAAC AGGCAAGTGC | 418 |
| AACTCGAG   |     |

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 276 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGATTGTAA  | AAGATTTTCC | TAGATTTACT | GTGTTCTGGA | 60  |
| TCTAGCTTGA | ACGTGAATGT | TTGTATAGTA | CGTTTCTTA  | ATATTTTSTA | GTATTCATAG | 120 |
| TATATAATCA | TACTAAACTT | GAGAACTGG  | AAGAATCAAG | TCTTCCTCAG | TTCTGTTTAG | 180 |
| ACTTTCTAGT | TTTTTTTAAG | GATACTTCCA | TATCTTCTGT | AAGCTACACA | GTGAGCTTCA | 240 |
| TTTTTGCACA | GTTATAATAC | ACTCTCGAAT | CTCGAG     |            |            | 276 |

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 379 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGGTTCGAT | GATAAGCACA | GGCGGCAGCT | GGATTGCAAG | 60  |
| TGGAGTGGTA | ATGGCCAGAA | CAGCCTCTTT | CTGTTTTGCA | TTTAGTCGAG | GATCCAACTG | 120 |
| TTCATCCCAT | TGTCTGTTAG | GACTCCATGG | TATGGTGGA  | GTCTACTGA  | TGTCTGGAAA | 180 |
| CAAAACCCCA | TTGTCCTTGA | TCCTGTCTAG | TGCATAGTGC | ATTTACAGA  | GGGGTAATCG | 240 |
| ATTTAATTGA | AACTGAAGTT | CAACCTGTGT | GTACAGTCA  | GGCCGAAGAT | TAAGTTCTTC | 300 |
| ACAGCATTCC | CTAGATAGCC | TTAAAAATAT | ATATTCCTTT | GTTTTTCTT  | CAATAGTAGC | 360 |
| TTCCTAGACC | TGCCTCGAG  |            |            |            |            | 379 |

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 417 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAGAGAAAGA | GAGTGAGAGA | GAGAGAGAAA | GAGAGAGAGA | 60  |
| GATGCTGTTG | AATCAGAAAC | AGATCAACAG | CCCAAAGATT | TTCTGTCCC  | TGGAGTGCCA | 120 |
| GCCCCAGGAA | GCTCCAGGGC | TGAGTGGTCA | GGAGCCAGTT | TCTCCAGCCC | CTCCTCCCA  | 180 |
| CAACCCCTAG | TGGGGAGGGG | CAGCTGTCCA | TTTGCCCAAA | GTATTAATGC | AACTGAAGCT | 240 |
| GTGATATTTC | CAACGACTGT | AGGAGGAAAA | ATTAAGGGGA | GAGAGGAAAA | CAAAACCAAC | 300 |
| CAACCCCTAA | AATCATTTTC | TTATTGTACA | TAACGACCTC | ATTCTCCTGT | ATATGCGGAA | 360 |
| GATATAACCT | TATATTTGGT | AAGTGTTCCT | TGTGCTATTT | TATCACGCGA | CCTCGAG    | 417 |

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 154 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

```
GAATTCGGCC TTCATGGCCT ACACAGAAAA ATTTCAACAA TAAAAGTTCT TAATTATGGG      60
AAATAGTTAC ATGTGTGTTA TATCATTTAT GGCTCATTTC GTATTTTAT TTTAAAGTAT      120
TAAAATCCA ACAGTAACAG CAATACAACT CGAG                                     154
```

(2) INFORMATION FOR SEQ ID NO:977:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 252 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

```
GAATTCGGCC TTCATGGCCT AAATTGTCT TTGCTCAAAT AACTGTAA ATTTATCTTG      60
GCAGACTCTA TTTTGATCCC CAAATTTGAT TTAGATTTGG GGCCATTAAA TTTCATATT      120
TAATAATAAC CCTACTGGAT GAGAATAAGT GTTCTCAAT TTCTGGTGAT ATGTTTGGC      180
TGTGTCCCA CCCAGAATCT CATCTGAAT TATATCCCC ATAATCCCA CGTGTCAACG      240
GCAGGACTCG AG                                                         252
```

(2) INFORMATION FOR SEQ ID NO:978:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 251 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

```
GAATTCGGCC TTCATAGCCT AGTTTAGTTC TCAGAATTCT TCATATATTT TGGCAGCAGT      60
TTTTCCATCA GATTATTTTG TAAATATTTT CTCCCAGTCT GTGACTTGCT TTTCCATTC      120
TCTTAACAGT GTCTTTCACA CAACAGAAGT TTTTAATTTT AATGAGGCTC AACTTAATTT      180
TTTTTTCATT AGTAGATTGT GCTTTTGTT TTGTATCTAA GAAGCCATCA TTGAACCCAG      240
GATCGCTCGA G                                                         251
```

(2) INFORMATION FOR SEQ ID NO:979:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 534 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGAAGGCTTC | TGAATAATTT | CTCAAACTA  | NCTTTCCATT | 60  |
| TNAGTACACG | ATTTGATAAA | CATAGCACAT | TAGATAGGTA | TTTAGCAATT | TCTTCTACCA | 120 |
| ACTACACTTT | GCCCTCACTA | AGGGTTAGAG | TATGATTTGA | AACAATTTCT | ACATATAAAG | 180 |
| CATCTTTAAA | TAAGTTTTGT | GTTCAGTGAA | CTGAGACTTC | TTTCACTTAT | GTACCTATGG | 240 |
| AAGTTAATCT | GAGCATACAC | ATATATACAT | ACTTGCATAC | ATATGTGTAC | ATATGTTTTT | 300 |
| TAAGTAAGTN | ACTTTTACCA | TTAGAATAAA | CCTAGACACT | ACAGGGACAA | CTCTGGGGAA | 360 |
| CAGGGCGGTC | TGCCTTAACA | ACCCTTCTCT | AGGTTGAGGA | AGGCAGGTAT | AGTTCAGTGA | 420 |
| AGGATGTGAT | GAGGCTGTAG | TAAGTCTTCT | CATCATCTGT | TAATCCTGCG | TTGCCTGGTC | 480 |
| TCACCACCAC | AGCTACGTGC | ACATCTGCTT | CCTCAGCAGC | ACTGGCCTCT | CGAG       | 534 |

## (2) INFORMATION FOR SEQ ID NO:980:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GCTCGAGTGT | CGTGCTATCT | CTAAATGTGT | ATCACTAAGA | ACCGCTGCGG | AAACAGTAAC | 60  |
| TGTTTCTTTT | ATTTTGTACA | TTTGTAGTTG | TAATTTATCC | AATTCCTTCT | TCTTTTGATA | 120 |
| AGTCTCCATT | CTCTTTACTT | CACGGGTATT | TTCAAATCCA | TTAATCATTT | TATCAGAGTG | 180 |
| CCACTTGTTA | GACCTAATG  | AACGATGTCA | CCCTCTTATC | AAA        |            | 223 |

## (2) INFORMATION FOR SEQ ID NO:981:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

|            |            |             |            |            |            |     |
|------------|------------|-------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AATTACTTGA  | CCCCTAATAG | GTTTGTGGCC | GTTTTCTGAT | 60  |
| GCCTAAGTAT | TATACAGAGC | CCACAATGGC  | CAGTTTACTA | CCAGAAAGGG | CTTCAGTAAG | 120 |
| ATATTCTTGG | ACTTGATACT | TTCTTCAGAT  | CCTCTTTGTG | CCAAGATAAT | TTATCCAGTC | 180 |
| ATTGGGAATA | GTAAGTTTCT | GTGTAACCCA  | TCTCAATTAT | AGAAGCAAGT | TCAGCTTTAT | 240 |
| GTATTTGTAT | GGGGAGTTGA | AGATTTCAGAT | AGAGGTATTA | AGATGTGTGG | CATTACTTAA | 300 |
| AACCATCACA | TTTTTTTCTT | TCTACGCCCC  | CTTGCCTGTA | AAACACCTGG | GAAGTTCCAC | 360 |
| TGGTGTATC  | CATCTGTATG | CTTCAGACCA  | CCCTCCCTTC | TTCACAGACC | GTGTCACTTT | 420 |
| GCCTGTGGGT | GGGGGCTAGC | CAGCCACCAC  | CCTCTTTTCT | GTGCTGCCAG | CCAATCTCGA | 480 |
| G          |            |             |            |            |            | 481 |

## (2) INFORMATION FOR SEQ ID NO:982:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

```

TCCGTGTCCC CTCCTCCCTC TGCCCCCAGT GTTCTTCTG ATTTTCTTTT CCCCTTTCCC      60
TCCCTCCCTC TCCGCATTCT TCCCTTGGTT CAGCACAGGT AAAACGGTTC CCCTCCCTCC      120
CTGCCTTCAT GGATCACCAG CTCACGTCAT GTTGCCTTCT CTTTCTTTTG TGTGTGTGTT      180
TATTTAAGTT ATTTTCTTTC CTCCTCTCCC TTTTCTTTT GGCCCTCCCT CCCTCCCTCT      240
TCTGCCATGT AACTGGAGGA TGTGCTATGA GTTGCAAAC AGCCGGACTC GAG              293

```

## (2) INFORMATION FOR SEQ ID NO:983:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

```

GGTGAGGATG GTGGCTGTGG TTGTGTTGGT GGCTGTGATG GTGAAGGTGG CTGTGGTGGG      60
GATGGTGACT CTGATGCTAA TGTGTTGTTGT GGTGATGGAG GCAGCTGTGG CAAGGATGGT      120
GACTTTGGTG GAGAAGGTGG CCATGTTGGG GCTAGTGGCT GTGGTTGTGG TGATGGCCAT      180
GGTGAGGATG GTGTTAAAGG TGGCTGTGAT GAAGATGGTG ACTGGGGTAG AAATGGTGAC      240
TGTGATGGTA ATGTTGGCTG TGGTGTGATA GGGTAGTTAT GGTGAGGATG ATGACTATGG      300
TGGTGAAGGG GCCATAGTGG CAACGGCACT CGAG              334

```

## (2) INFORMATION FOR SEQ ID NO:984:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 631 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

```

GAATTCGGCC TTCATGGCCT AGGGAAAGAG TAGGGGTGGA GGGGTAGGAG GATTTACTCT      60
TCCAGCGAGA GCTACGCGCA TCCCATCCTC CCCCTCCCCC CTACCCGGGC TCCGGCNTGG      120
AGGCGGGGCG TGGCCGGCCT GCTTTGGGAG GGGAGGGGCT TCCCTTACAG TGCTGGGCTC      180
TGCCAGGACG GCTGTGGGGT CGCCTTACCT CGGGGTATCC ACTCTGCAGT CGACCAGTTC      240
CCGCCAGGAG CAAAGGGTAG GAAGGAGAGC AGGATCTGCT GTAGGAACGC AGCTACCGCG      300
CCACTATCAC GAAGAAACAG CAGGCTCGGG GCACGAGACG AACTGGAGAC CGCGCTGCCT      360
AGCTGGGTAA CCTGGGAAGC AGAGGGTAAT AAGTGGCGCC TTAAGATAAC CCTGTAGCAG      420
CAGCAGTGGC GGCCAAAGGA GGCTGCTCAG GGAACAAGCG GCTGTAGTAG TCTGTGGGGC      480
GACTGGAGTG ACCGAAGCCA AGGCAGTTTA GTGCCTCTCG TGTCTTATT TTTTAACCTC      540
TGACTATGCA ATTCTGAAC CTCCCCCATT CGGGGGACCA GACAGCCTGA TAGACACCTT      600
CCACTCTCCT TCCTCCCGCC GTGGTCTCGA G              631

```

## (2) INFORMATION FOR SEQ ID NO:985:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACTGCCTCGG | TTTCTACCTT | TGCCAAATGA | GTTGATAGAT | 60  |
| TATCGCTTTT | TTTCCAGCTG | TCATACTCTA | GGAGTCTGAA | TTGTAAAATC | AAAGAAGCAT | 120 |
| TTCCAGAAA  | AGTTTTTGTC | AAAAATTGA  | TTTACATAAC | CTCAGAAATG | TGTATTGCTT | 180 |
| TAAAAATTAT | AAAGTTCATG | GAGCATACCA | AGCAGCCTGT | ATACCATTTC | TAAACCAACT | 240 |
| ACTCCCTGC  | AAGATAGATC | TCTTTTTTAT | AGACAGAAAA | TAAATTCAA  | GAGGTTTGT  | 300 |
| ACTTGCCCAA | GGCCACCACT | CGAG       |            |            |            | 324 |

## (2) INFORMATION FOR SEQ ID NO:986:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCT | TTCATGGCCT | AAAATGTTTT | TCAATTAAAG | ACTTAAATAT | TACACTTTTA | 60  |
| AAACTTTTTA | TTATGGAAAT | CTAAAAAAA  | TTCACCAAAT | GAGAGAGAAC | ATTACAATGA | 120 |
| ACCACCACAT | ACCCATCACC | CATTTTCAAC | AATTATCAAC | ACATGGCCTA | TCTTGTTC   | 180 |
| TCCATACCTT | CAGACACCCT | CGTCCACAA  | ACTGGGTAT  | TCTGAAGCAA | GCCTTCGAG  | 239 |

## (2) INFORMATION FOR SEQ ID NO:987:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 695 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

|             |            |            |            |            |            |     |
|-------------|------------|------------|------------|------------|------------|-----|
| AAAAGTTCAG  | GGACTTTGCA | CCCTGTGGGG | TACTCAGATG | TCCAGCCGCA | CTCTCTACAT | 60  |
| TAATAGTAGG  | CAACTGGTGT | CCCTGCAGTG | GGGCCACCAG | GAAGTTCGG  | CCAACTTTAA | 120 |
| CTTTGCTAGT  | GATGTGTNGG | ATCACTGGGC | TGACATGGAG | AAGCTGGCAA | GNGACTCCNA | 180 |
| AGCCCAACCC  | TGTGGTGGGT | GAATGGGAAA | GGGAAAGAAT | TAATGTGGAA | TTTCAGAGAA | 240 |
| CTGAGTGAAA  | ACAGCCAGCA | NGCAGCCAAC | TTCTCTCGG  | GAGCCTGTGG | CTTGCAGCGT | 300 |
| GGGGATCGTG  | TGGCAGTGAT | GCTGCCCNCA | ANGCCTGAGT | GGTGGCTGGN | GATCCTGGGC | 360 |
| TGCATTTCGAG | CAGGTCTCAT | CTTTATGCCT | GGAACCATCC | AGATGAAATC | CACAGACATA | 420 |
| CTGTATAGGT  | TGCAGATGTC | TAAGGCCAAG | GCTATTGTTG | CTGGGGATGA | AGTCATCCAA | 480 |
| GAAGTGGACA  | CAGTGGCATC | TGAATGTCTT | TCTCTGAGAA | TTAAGCTACT | GGTGTCTGAG | 540 |
| AAAAGCTGCG  | ATGGGTGGCT | GAACCTCAAG | AAACTACTAA | ATGAGGCATC | CACCACTCAT | 600 |
| CACTGTGTGG  | AGACTGGAAG | CCAGGAAGCA | TCTGCCATCT | ACTTCACTAG | TGGGACCAGT | 660 |
| GGTCTTCCCA  | AGATGGCAGA | ACATTCTTAC | TCGAG      |            |            | 695 |

## (2) INFORMATION FOR SEQ ID NO:988:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

```

GAATTCGGCC TTCATGGCCT ACTCAGAACA ATCACTGCAT ATCCCATCTT AAAGGCAAAA      60
CCCAAACCCAG AAAAACCCCA CTCAGGTCTT GCTGACCCAA CACTACAGTC ACTGTATTTG      120
AGACCCCTTT TTCTTGAAAA AGGGACTTCA CTTTTTTGAG CAGCATTCTA TGGTTCTTTC      180
CACACAGCAA TTGACGCATC TCACGGCACT GCTCTCTGCT GGGCAGAGAG CAAACACAGA      240
CAGCCACCAT CCCCATATTC GTAGTAAGAG AAATCCAGA AACGCAGCCA CCGTCCCCCT      300
AGACCTGCCT CGAG                                     314

```

(2) INFORMATION FOR SEQ ID NO:989:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

```

GAATTCGGCC AAAGAGGCCT AGGAGCTCCC CCATGGATCA TGGCGTTAAT GTTTACAGGA      60
CATTACTAT TCTTAGCATT ATTGATGTTT GCTTTCTCTA CTTTGGAGGA ATCTGTGAGC      120
AATTATTCCG AATGGGCAGT TTTCACAGAT GATATAGATC AGTTTAAAC ACAGAAAGTG      180
CAAGATTTC GACCCAACCA AAAGCTGAAG AAAAGTATGC TTCATCCAAG TTTATATTTT      240
GATGCTGGAG AAATCCAAGC AATGAGACAA AAGTCTCGTG CAAGCCATTT GCATCTTTTT      300
AGAGCTATCA GAAGTGCAGT GACAGTTATG CTGTCCAACC CAACATACTA CCTACCTCCA      360
CCAAAGCATG CTGATTTTGC TGCCAAGTGG AATGAAATT ATGGTAACAA TCTGCCTCCT      420
TTAGCATTGT ACTGTTTGTT ATGCCAGAA GACAAAGTTG CCTTTGAATT TGTCTTGAA      480
TATATGGACA GGATGGTTGG CTACAAAGAC TGGCTAGTAG AGAATGCACC AGGAGATGAG      540
GTTCCAATTG GCCATTCCTT AACAGGTTTT GCCACTGCCT TTGACTTTTT ATATAACTTA      600
TTAGATAATC ATCGAAGACA AAAATACCTG GAAAAAATAT GGGTTATTAC TGAGGAAATG      660
TACGAGTATT CCATGGTCCG TCTCGAG                                     687

```

(2) INFORMATION FOR SEQ ID NO:990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 677 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

```

GAATTCGGCC AAAGAAGGCC TAGAGCCCTT CTGTCCCTTC TACCATGTGT GGATGCAGTG      60
AGAAGGCACC GTATCTCTGA AGCAGAGAGC CCGCCCTGGA CACTGGATCT GCTGGCACCT      120
TGATCTTGA CTTCCAGGCC TCTAGAAGTG TGAGAAATAA TTTTTTGTG TTTACAAATT      180
ACCCAGGCTA AGGTGTTTCA TTGTAACCTG AATGGACCAA GCTGGTGTGA CCCTGTTGGA      240
AAACTGGCAG TATCTACCAA AAGCCGAACA TACGTATAAA CTGATCCAGC AGTTCCACTC      300
CTGGGTATGT ACACCACAGA AAGCTATGTC CACCGAGACA TTGGCAAGAA TGTTTCTAAC      360
CACACGCTGA CTGTAGCCCC AAACCTGAAA CAACCCAAAT GTCCATCCAC CAACCCAAAT      420
GTCCATCCAC AGTTGAAGCT ACAGTGAAGT CACAGGGTCG AATACTACTG CACAGCAACG      480
AATATGAATG AAAATATCGC TATGCACAGC AACATGGATA AATTTACAG ACATGAGGTC      540
AAGCAAAGA GGTCAAGATC CTCATCATCA AGAGAGAATT CATTGTATGA TTCTCTTCCT      600
ACAAAAGTA CAGAAATAAG CAAAACGTAT CCATGGTGTG AGAAGCCAGG GGAACAGTTA      660

```

ACAAGGGAGC ACTCGAG

677

## (2) INFORMATION FOR SEQ ID NO:991:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AAGAAGCTGC | TTCCTCCTGG | GAACAACCGC | CTCCCCTCC  | 60  |
| TAGCAGGTG  | CTACTGCCCC | GAACCCGCGC | TGCAGGGAAC | AGCGGGGCAA | ACAAAACCAA | 120 |
| TAGAGCCATG | GCGACTCCCT | CTGCTGCCTT | CGAGGCCCTT | ATGAATGGTG | TGACAAGCTG | 180 |
| GGATGTACCC | GAAGATGCTG | TTCCATGTGA | ACTGCTTCTT | ATTGGAGAGG | CTTCATTTC  | 240 |
| TGTGATGGTG | AATGACATGG | GCCAGGTCCT | CATTGCTGCC | TCCTCCTATG | GCCGTGGCCG | 300 |
| CCTGGTGGTC | GTGTCCCATG | AGGACTACTT | GGTGAAGCC  | CAGCTCACGC | CCTTTCCT   | 360 |
| GAACGCAGTG | GGGTGGCTTT | GCTCTCCCC  | TGGGGCTCCC | ATTGGTGATC | ACCCATCCCT | 420 |
| GGCACCTTTG | GCCAAATCC  | TCGAG      |            |            |            | 445 |

## (2) INFORMATION FOR SEQ ID NO:992:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACTGTGATTT | AAAATCTTGC | TGTGTGGCTT | GGGTTGTTG  | 60  |
| TGTTGGTTCC | AAACCCTGAA | TCTTTTGGGG | TCTTCAATTT | GTGGGCATGT | CAGTGGAAT  | 120 |
| TCTAAGCTTT | GTTTAATGGT | GTGTGTGTGT | CTGTCTGTCT | CTGTGTGAGT | GTGTTTAGAA | 180 |
| ATTGGCTTCT | CTGGGTTTCT | CGCTCGTCTT | CTGGAAGGTG | GGGTTATAGA | CATGCTGGTG | 240 |
| AATTCTGAAT | GTTTATATAA | TTAGACTATT | AACGGAGTTA | AATTGAAGAA | ACCTTCTGTC | 300 |
| ATAAGACCTT | CCAGGAATTC | CATTCCAAAT | GAGGAAATGC | ATAAAGACTT | GTCCACTTGG | 360 |
| CAAACATTGG | GTGTTTGGGA | GGTGGACTCG | AG         |            |            | 392 |

## (2) INFORMATION FOR SEQ ID NO:993:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGCGGCTCC | CTTGGTCCTG | GTGCTGGTGG | TGGCTGTGAC | 60  |
| AGTGCGGGCG | GCCTTGTTCC | GCTCCAGTCT | GGCCGAGTTC | ATTCCGAGC  | GGGTGGAGGT | 120 |
| GGTGTCCTCA | CTGAGCTCTT | GGAAGAGAGT | GGTTGAAGGC | CTTCACTGT  | TGGACTTGGG | 180 |
| AGTATCTCCG | TATTCTGGAG | CAGTATTTC  | TGAAACTCCA | TTAATAATAT | ACCTCTTTCA | 240 |

TTTCCTAATT GACTATGCTG AATTGGTGT TATGATAACT GATGCACTCA CTGCTATTGC 300  
CCTGTATTTT GCAATCCAGG ACTTCAATAA AGTTGTGTTT AAAAAGCAGA AACCTCGAG 359

## (2) INFORMATION FOR SEQ ID NO:994:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

GAATTCGGCC AAAGAGGCCT AGACTGTCAG CTGTGAGTGG CCAGTACAAC AAATGCTTTG 60  
GCTTTCAGTT GTCATTCTGA TGTCTTGCAA CATATCATCG TGTTCGATTG TCGAG 115

## (2) INFORMATION FOR SEQ ID NO:995:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

GAATTCGGCC AAAGAGGCCT AGTGGAGACA AAAGCATGTG ATCCCAATTT GCTGGGATAT 60  
CCTCTCCTGC ATTTCAAACA CCTTCACTCA GTGTCAGCCA CAGCGGCCAC CACATAGCAG 120  
CTGGCCCCGC ACCTTCTCTG GAACAGTCTG GAGATGCAAG GTCAGGGTGG AAGGCCTGGT 180  
TCACCCCTGA AAGAAAGGAT GGCTAGGGGT AAACAAGACG AGCAACTCCC TGGAAATGCAG 240  
GGAGCCAAGA AGGGCAGCCG AGGATAAGGC TCTGCCTCCC CAACGGCCGAG GGTTCCTTTT 300  
CCTTCTGGTC ATTANAAGT CACAGCCCCC GGGGAGATGT TGAACATGGC AGGGTCGAAT 360  
CGCTGGCCTC GGAAGGGAGA ACTTCAGCAT CCCACCCTTC TTCAGCATCT CATGGACTTT 420  
CAGCTCATGG CTCTGTGGCT TGCCCTGCAG CTTCTGGTGG TAGTCAAAGG TAAGCCTGTC 480  
CAACACCGCC TGTTCTCCT CATCCACGGT GGCCATGGAG CGCTCCTTGT TGATCTTGTC 540  
AATGTCGATG GGCTCTTCTC CCTCCAGGAT GCGGTTCCAC CAATACTCGC CCACCTTGCT 600  
CAGGTTCAAC AAAACGCACT TCCCGGGCTC GAG 633

## (2) INFORMATION FOR SEQ ID NO:996:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

GAATTCGGCC AAAGAGGCCT AGTTGATTCT CAGTTCATGG TGGAGTCATT CAAGTTTATT 60  
TCTGGCATCT TGGCAGCCCT GAGTGCCATG ATCTCTCTAG AAATTCCGCA AGTCAACATC 120  
ATGACAAAAA TGGATCTGCT GAGTAAAAAA GCAAAAAAGG AAATTGAGAA ATTTTATAGT 180  
CCAGACATGT ATTCTTTATT AGAAGATTCT ACAAGTGACT TAAGAAGCAA AAAATTCAAG 240  
AAACTGACTA AAGCTATATG TGGACTGATT GATGACTACA GCATGGTTTCG ATTTTACCT 300

TACGATCAGT CAGATGAAGA AAGCATGAAC ATTGTATTGC AGCATATTGA TTTTGCCATT 360  
 CAATATGGAG AAGACCTAGA ATTAAAGAA CCAAAGGAAC GTGAAGATGA GTCTTCCTCT 420  
 ATGTTGACG AATATTTTCA AGAATGCCAG GATGTACTCG AG 462

## (2) INFORMATION FOR SEQ ID NO:997:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

GAATTCGGCC AAAGAGGCCT AGCTGGTAAC ACATGTGAAC TCAGGTAAAG TCATCGAGCA 60  
 TTTTACTGAC TCTATTCCTC AATAAAGTAC TGGGAAAAAA CTCATAAGAA TGACAAAAAC 120  
 AACATACTCA GGTATGCGAG CAGAAGCCTC TGACACAGCT TGTCTTCGGG GCTTAACTAA 180  
 ATGATCTATT TTAATGAGGG AATCCGTGGA AAGGCATGCG TTTTCAGGCT CATTTTCTGC 240  
 TTCGATGCTT TGTCCAGAGA GTTGGAATCT CAACGTGTGT TTCATGTGAG GTCCTTAAG 300  
 AGGGTGACAT TCAACATCCC AAAACTGGGC ATAATCCCCC CTACCTCTGG GCAAAAATGT 360  
 GATGGAGACT TTTTGATCC CATGGCTTTC CAGCAGACCA GAAATAGGAG AACATCTGAA 420  
 TGCTGCATAG GTAGCTCTAA AAACATCTCC ACTTTCATCA ACTCCCTTGA CATAAGGTGG 480  
 CACCACAGAC GTGAAATGGC ATCTGTCATC TTTAGCGCCA CCTTATGTCA AGGGAGTTGA 540  
 TTCTCGAG 548

## (2) INFORMATION FOR SEQ ID NO:998:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

GAATTCGGCC AAAGAGGCCT AGTTCCCTT TCTGTATTTT ACTACTAAAT TAGAAAGCAC 60  
 TGGTTATGTA ATAAGTTACT ACATTGCTTT GGTGAGTAA AAACAAGAGT ATATATTTTT 120  
 CTTGTTTCTT ATTTNCTAAA CCCTTAACTC CTGCTGAGGT CATAACAACC TCAGTCTAAG 180  
 CTCTGTGTCC ATCATACTGT TAACTTAAAC AAATGGGTGG TGGGGGTGGG AAGGGTAATA 240  
 CAGTCCTGCC ATTGCCTACC AGTAGGAGAG TCCAAACAGA ACACTCTTTT GAGTAGCAAT 300  
 TATTTAATTT GCCCAGTCAA GGCACCGTGT TTATATACTA TTTCACATTG AATTTGATTA 360  
 TGCCCTACAG ACCTGGCTGG TCAAGGATTT GATATACACA TATTGGCTTG GGATTCGAGC 420  
 TTTCTTTTTT ATTTAAATAA AAATTTATAT ATATATTATA TATATACATA TATACATAGC 480  
 TATATCTGTA TATATATTGG GTATGTTTTA AGGATTTTTT CGCATGAGCG CAGCTGTTGC 540  
 GATAAATTGA CCGATTGGGA GGTATTCTCG AG 572

## (2) INFORMATION FOR SEQ ID NO:999:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGAGGGGAGC | ACGTCTTTTC | CTTGAGTGTA | ATTCACAAAT | 60  |
| GACTGTGGTT | CCAAGGAGGT | GCGACCTTTA | AAGGGAATTG | GCCCTTCTTT | GAAGGCAGGT | 120 |
| GAGAATCTAG | TCTCAGTGAC | AACCCAGCCT | GATTTGGAAG | GGGGGAGTCA | TAAGGGTTTT | 180 |
| CGCCCAGCAC | ACCAGGGTTG | CAGCCTGCGC | AAGACCTTCC | ATAGCTATTT | CTGCCGGCTT | 240 |
| GCTTCCCTTC | CTTCCAGCC  | ACGATGAGGC | AGCTGAGGGT | TGCCACGGAA | ACCGGCTCTG | 300 |
| TCCTCCCACT | GGAGGCTGCC | AGCTCTGATT | TCCTGCAGAG | TTAAGAAGGA | GGCGGCAGTG | 360 |
| GGGGTCACCC | AGGCGTGAAG | ATGGGTTTCC | CTGGGGATAT | CCTGCCTCCT | GCCCAATACA | 420 |
| GCGTCTCTCT | GGGAATCCTG | GGGGTGCTTG | GAGGCTGAGG | CCCAGGGAAG | CCCCCAAACC | 480 |
| CCAGTGCTGC | TCTGAGAAGA | GACTAGCCTC | TGGGACATTC | AGAGGTCTGG | GGTTCCTTTA | 540 |
| TCTCCCTCCA | GCTAAGCTA  | GAGGGACCTC | ATTATGTGTC | TTACAAGATG | TACCCTAAAC | 600 |
| CGTCGATTGA | ATTCTAGACC | CGCTCGAG   |            |            |            | 629 |

## (2) INFORMATION FOR SEQ ID NO:1000:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACCTGTATGC | TATTAACACT | CACCACAGCA | GAGAGCTGAG  | 60  |
| GATTGTGGTT | GCAATTCGGA | ATAAACTGCT | TCTGATCACA | AGAAAACACA | ACAAGCCAAG  | 120 |
| CGGGGTCACC | AGCACCTCAT | TGTTATCTCC | CCTGTCTGAG | TCACCTGTTG | AAGAATTCCA  | 180 |
| GTACATCAGG | GAGATCTGTC | TGTCTGACTC | TCCCATGGTG | ANGACCTTAG | TGGATGGGCC  | 240 |
| AGCTGAAGAG | AGTGACAATC | TCATCTGTGT | GGCTTATCGA | CACCAATTTG | ATGTGGTGAA  | 300 |
| TGAGAGCACA | GGAGAAGCCT | TCAGGCTGCA | CCACGTGGAG | GCCAACAGGG | TTAATTTTGT  | 360 |
| TGCAGCTATT | GATGTGTACG | AAGATGGAGA | AGCTGGTTTG | CTGTTGTGTT | ACAACCTACAG | 420 |
| TTGCATCTAT | AAAAAGGTTT | GCCCCTTTAA | TGGTGGCTCT | TTTTTGGTTC | AACCTTCTGC  | 480 |
| GTCAGATTTT | CAGTTCTGTT | GGAACCAGGC | TCCCTATGCA | ATTGTCTGTG | CTTCCCGTA   | 540 |
| TCTCCTGGCC | TTACCACCG  | AACTCGAG   |            |            |             | 568 |

## (2) INFORMATION FOR SEQ ID NO:1001:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 543 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGTAATACTT | AAAGTGCAAT | TGTTCCAAGG | CTTTTGTTC   | 60  |
| CATCATCACA | AATATTATAA | AGAAAGAGCT | ATGTTTAGGG | TGAAGAAGAT | ATGGCACAAAG | 120 |
| TAATATGTAA | AGAACTTATG | ACTTTCGCAT | CCTCTAGCAA | ACAGTAAGCT | GCCTGTACAG  | 180 |
| CTGCACACAG | ACGGACTTTA | CACAACAAC  | TCTGGAACCT | CATCATGAGT | GAGATCCAGA  | 240 |
| GAAAAGTATT | TGCTGGTTCT | TTTGACTGGA | AAAGCATCTT | GGATGTTGAT | GCACCTGCTGG | 300 |
| GCCAAGCAAC | TGTTGCAATA | GAGGCCTTCC | TCATCCAGTT | CATGGCCACA | TCCAAAGGTG  | 360 |
| TAACCTGAG  | CAGTGTCTCT | ACACAGACCT | GCAATGCGCA | GGAAGTCTTT | CTGGTAAAGT  | 420 |
| CTGATGTCAT | CGAGGCTCAA | GCTGTGTCGA | TCAGTGGAGG | TCTTTGTTTT | CCGACATATA  | 480 |
| GTCTGTGGAA | GAGAATCAGT | ACTCTGGCCA | CGAAGCTTAA | CAACTGTTTC | TGAAGAGCTC  | 540 |
| GAG        |            |            |            |            |             | 543 |

## (2) INFORMATION FOR SEQ ID NO:1002:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

```

GAATTCGGCC AAAGAGGCCT AATTCACCTT ACGAATTAAC ACTGTGTACA TGGCACCTTT      60
GGGCCCCATCT TGCCTTGAAA GTCCCTGTTG GATGGAACAG TGGCATTTTC CTTCCCTTTC      120
TCAGGACTGC AAACAGACCT AATATTTGGC CTTGCCCTTG CCTGGGAAGC TGCTGCTGAG      180
TCTTGCTCTCA GCCGGGCTGT GCATTCCGAG CGGCTGCCCT GCCCTGCGCT CAGCAGCTGG      240
AATCAATCTG CCCACCTCCT TAAGAAGCCA CTTTCATCAGC GGTCAACCGG CAGCTGCTCG      300
CCTCCAGGG CTGCCGGGCT AGGGCTTTAT CGCATTTTTC AAATTCAGA TTTCTGTGTC      360
TGGGCTATGC CCCTCGAACA GTAACAGCAC CGCTTTCAG CAGGGAGGAG ATTTCACCAG      420
GATATGGAGG GGACAGGAGA AAAGCCCTCC TTCCAGAGT CCACTGTCAT TCAGGATTTC      480
CTCTCAAAGA GGCAAGAAAT CTCTAAGAAT GAAAGGAGGT GTTTGTGTGT TGTGTGTGTT      540
TTTTGTATGT ACTGGGAGGA AATGGCTAAT CTTGGGTATG CACACGCTCG AG              592

```

## (2) INFORMATION FOR SEQ ID NO:1003:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```

GAATTCGGCC AAAGAGGCCT AGGCTCCGTC TGTTGGGGGG CGAACACGCC GCGGTCTCTG      60
TCGTGTGAAG TAAGAACTCT GCTAGAGAGG AAATGGCTGC TTCATCATCA TCCTCCTCAG      120
CTGGTGGGGT CAGTGGAGT TCTGTCACTG GATCTGGTTT CAGTGTCTCA GACCTTGCCC      180
CACCACGGAA AGCCCTTTTC ACCTACCCCA AAGGAGCTGG AGAGATGTTA GAAGATGGCT      240
CTGAGAGATC NTCTGCCAAT CTGTTTTTAG CTATCAAGTG GCATCCACGC TTAACAGGTT      300
GAAACATGAT CAGCAAGTTG CTCGGATGGA AAACTAGCT GGTGTGGTAG AAGAGCTGGA      360
GGCTGACGAG TGGCGGTTTA AGCCCATCGA GCAGCTGCTG GGATTCACCC CCTCTTCAGG      420
TTGATACTGC CTGGATGGTC ACCTCTGGTG CGCAGCAAGT GCAAAGCCAG TGGGGGACTT      480
TCTCACAGCT TACATAGCCA TCCAGAGATC CACAGCTACG TCACTGAATT GTTAATGCAC      540
ATTTGTACTT GGTTTCTCTG TATCTATTCA CAGGCGAACT CGAG              584

```

## (2) INFORMATION FOR SEQ ID NO:1004:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

```

GAATTCGGCC TTCATGSCCT ACTTTCTCAT TCCCTAAGTC ATTAGAAAGC ACCAGTTCTA      60

```

```

ACTCCAAATG ATGACATGGT CTTATTTTAT CTATTAACCA TAAGCTTACA GATTCTAGTG      120
AAGAAAAAAC TTAGGAGGC TACATGGTCT ATTGGAGAGT GTAGGCTCTG CAGTCAGAAG      180
ATCCCTACCC AGGCTTCTGT CTTTCTCAGT AAGACTTGGG ACCACAGCAA GGTCCGCAAT      240
CTCCTGAGGC TGTGTTTCT ATGTTTGGGA TAACATGGTA AGTTATTTTC TTCTAAGTAG      300
TCACACATGG AAATCTTATC TAAAATTTTA TACCATTAAC TTTTATTCA CTTATTAAC      360
CATACCATTA ATACTTTACT TTAGCTATGT TTGGTATGCA TGAGTTGATG AGTGATTAGA      420
GTACTATGAG CGATCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1005:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

```

GAATTCGGCC TTCATGGCCT ACTCAGTTGC AGATTCTGGC CAACATGGAC AGCCAGCTAA      60
AAGAGCTACA GAGTCAGCAT ACCCATTGTG CCCAGGACCT GGCTATGAAG GATGAGTTAC      120
TCTGCCAGCT TACCCAGAGC AATGAGGAGC AGGCTGCTCA ATGGCAAAAG GAAGAGATGG      180
CACTAAAACA CATGCAGGCA GAACTGCAGC AGCAACAAGC TGTCTGGCC AAAGAGGTGC      240
GGGACCTGAA AGAGACCTTG GAGTTTGAG ACCAGGAGAA TCAGGTTGCT CACCTGGAGC      300
TGGGTCAGGT TGAGTGCAA TTGAAAACCA CACTGGAAGT GCTCCGGGAG CGCAGCTTGC      360
AGTGTGAGAA CCTCAAGGAC ACTGTAGAGA ACCTAACGGC TAAACTGGCC AGCACCATAG      420
CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1006:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

```

GAATTCGGCC TTCATGGCCT AGAGTAGCCA GGGAGCTGGA AGTTCACAG ATTGGTTTAA      60
ATAAACAAAC TCCCTCAATG ATGAGTGGTC TTTTGAAGAG CATGGTTAGA ACTTGGGATT      120
GTGCTTCTCA TGACTACAAA TGTACTTGTG GCTTAGGTGC AAAAGGGTAG GTCAGTGGGT      180
AGCTAACTAC TGAGGATTGA TTTTCTGAC GCTGGTGTTC AAGTGTCAAC CAGAACTGGC      240
ATATAAAGTG GCTCATTAC CCAAGTATCT TCCTTTCCTT TTTACAAAAT CCTTGGCTGT      300
TGTGGGGCCT ACATCTCTTC ATGATTATTA TTGCATCTGG TGTATGTTT TTCCAGCTGG      360
TGTACTGCTT CCCTGTAGGC TTCTTGATGT TCACTCCTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:1007:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

```

GAATTCGGCC TTCATGGCCT ACTGGTGCCA CGGGAGGCAG ACACCAAGTT CTGGGGTCTC      60
CAGCTGCAGT GGGTGGCCGC CAATTGCTTC TCTCTGTCCA GACTAATGAG AACATGGAGA      120
TCACCAAGTC ACTGCAGTTG GAATAGCAGC TAAAGAGGGA GCTGGGAAAG AAGCTGGGCA      180
AGCTAAAGGA CATGGTAACC CTGCCCCATC CAAGAAGAGC TGAAGAGCGG GCACCAAGCCT      240
CTGGGGAGGG GAGGTGTGAA GCCAGAGGCA GCTCCAGCCT GGGGGACAGG TGACCCACAG      300
ACCTCCAGG GCAGTCTGT GACTGTTTCT TGCTTCCC GCCTCTGACAT TTAGTGGTGG      360
GTTCTGTTCT CTAGGTCTG GACATCATCA TCCCAGCTGG AGTCATGGAG CCTCCCAAAC      420
ATAGGGAAG AGATGGTGGT ATAAGAGGCT CTCGAG                                     456

```

## (2) INFORMATION FOR SEQ ID NO:1008:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

```

GAATTCGGCC AAAGAGGCCT AGGATGGCTG TGTTTGACGG GTGTTGCTCG TGACAGTTGG      60
GGTCCTCCTC AGCATCAGTC TTGACATGGC TGCAACTGGG GGGGTCCTCG GGATCCTCCC      120
GGAATCTCTT CCTCAGCATT CGCTCATGAT AAGGTTTCAG GTGTCTTGAT GGTTCAGTCC      180
TGGAGAAACA TAAGCATAAC CTCTACCCCA AGTATTATT TTACCTATT CCCTCACTTC      240
TGTTATCAGG TCTCTCCACC AAACCAAGTTG TTCTGCTTCT GTCTTTGCAG CTGGTTTCTG      300
TAGATGCTGT TCAGCTGCTG ATAAGATCCG GCCTTTAGGC AGGCTCAAAA AATTAAAGT      360
TAATAATGCG ATTCAATTGC TTATGGGGTG TCCTGTAGTA CCTGTTTCC CCCTTTTGCT      420
TCTGCAACTG CTGTTTCAGG GAGAGATTCA TTCTTTCAC TATGGCNTGT CCTTCAGAAT      480
TATATGGGAT ATCAGTAATG TGTTTAATAT TCCGTATAGA GAAAAATTTA GCTAGAGCTT      540
GAGAATTAGG TTCCAATCCT CGAG                                     564

```

## (2) INFORMATION FOR SEQ ID NO:1009:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

```

GAATTCGGCC AAAGAGGCCT AGAAAAAGAT GTCATTCCGT AAAGTAAACA TCATCATCTT      60
GGTCCTGGCT GTTGCTCTCT TCTTACTGGT TTTGCACCAT AACTTCCTCA GCTTGAGCAG      120
TTTGTTAAGG AATGAGGTTA CAGATTGAGG AATTGTAGGG CCTCAACCTA TAGACTTTGT      180
CCCAAATGCT CTCCGACATG CAGTAGATGG GAGACAAGAG GAGATTCTCG TGGTCATCGC      240
TGCACTGAA GACAGGCTTG GGGGGGCCAT TGCAGCTATA AACAGCATTC AGCACAACAC      300
TCGCTCCAAAT GTGATTTTCT ACATTGTTAC TCTCAACAAT ACAGCAGACC ATCTCCGGTC      360
CTGGCTCAAC AGTGATTCCC TGAAAAGCAT CAGATACAAA ATTGTCAATT TTGACCCTAA      420
ACTTTTGGA GGAAGAGTAA AGGAGGATCC TGACCAGGGG GAATCCATGA AACCTTTAAC      480
CTTTGCAAGG TTCTACTTGC CAATTCTGGT TCCCAGCGCA AAGAAGGCCA TATACATGGA      540
TGATGATGTA ATTGTGCAAG GTGATATTCT TGCCCTTTAC AATACAGCAC TGAAGCCAGG      600
ACATGCAGCT GCATTTTCAG AAGATTGTGA TTCAGCCTCT ACTAAAGTTG TCGATCTCGA      660
G                                                                                   661

```

## (2) INFORMATION FOR SEQ ID NO:1010:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 316 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

```
GAATTCGGCC TTCATGGCCT AGGAAAGATT TGA CTGCTTC TCTCATGCAG GGAATAAAG      60
CAAAGGCACG TGCAGAGGGA AGTAGGGGTA GAGAGAGGCA AGTTAGCTTC AGAGAGATTT      120
ATTTGCACCC AGTTCTGTTC TACTCAGCCT GACGTTTTAT CATCTTTTGG AAAAGTGGCG      180
TGAAGTGGTG TGGAACACAT CAGAGGGTGA AGCCGAGCAA ATCTGAAAGA GAGCAGAGGA      240
TTTCATATGA TATCCTATGT GTGCTTTCCC CTTCTTCTT AGGAGCTGGA AGAGGCAGAA      300
TTGATGTCCA CTCGAG                                     316
```

(2) INFORMATION FOR SEQ ID NO:1011:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 244 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

```
GAATTCGGCC TTCATGGCCT AGAAACATGC TAGACATTTT GAAGAACCAG CAAGAATGTT      60
AGTGTAGCCA ACAGTGAGGC AGGCAAAGGT GAGTAAGSTA GATTAGTTCA GGAAGAAAAA      120
CATAACATTA TTTAATCCAT TGTGGGCCAC ATTGCACTAT GATAACACTA TCATGTGATA      180
GAGTCTCACC ATTGTTTAAAG ATGTTTAAAT TTTTAAATAC GAATATATTC TCACACCCCT      240
CGAG                                     244
```

(2) INFORMATION FOR SEQ ID NO:1012:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 355 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

```
GAATTCGGCC TTCATGGCCT AGCACTTCCC GAGACTCTCT AGCCTTGAT AAAGAGAGAA      60
TGGATAAAGA TCTGGGATCT GTGCAGGGAT TTGAAGATAC AAATAAATCC GAGAGAATCG      120
AGAGTCTGGA AGGAGATGAC GAGTCCAAGT TAGATGATGC ACATTCATTA GGCTCTGGTG      180
CTGGAGAAGG ATACGAGCCA ATCAGTGATG ACGAACTAGA TGAATTTCTG GCAGGTGATG      240
CAGAAAAGAG GGAGGACCAA CAGGATGAGG AGAAGATGCC AGATCCCTTA GATGTGATAG      300
ATGTGGATTG GTCTGGTCTT ATGCCAAAGC ATCCAAAAGA ACAACGAGGC TCGAG          355
```

(2) INFORMATION FOR SEQ ID NO:1013:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 351 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT ACAGCCTAAA TGTTTTATTT CCTGAGAGGC TGGAACTCTGT | 60  |
| ATTTGTGGTA TCAATCAGTC AACTGAAATT TATTAAATGC CTGCTGTGAG CAAGGCCTAA  | 120 |
| TGCTGAGGGA TGTAAGAAG AGTGAGAAGC TAGTCTGGTT GGGGTNATAT GACATGGCAA   | 180 |
| GTCATAGAAT GAAGAAGCGT ATTCCTTGTC ATATGAAAGC TGCAGATTAG TGTGGTTCTA  | 240 |
| AGTAGAGGCC AGGGTCACTG GAGTCTAGGA TTGCAGGGTT GGCTGGCTTC CCAGAGGCTA  | 300 |
| AGAATTTAAT TTGGATCTTG AAGATCTGGT CCAATTCCAA CANGACTCGA G           | 351 |

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 393 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGGCCTTGTA TTTTCTCTTA TTTTCTGCTA AATTAGAAAG | 60  |
| AAATTGCTG TTTCAAATAT ACTCAAGCTG TTCAGTTCTT CAACAAAAG TAGGTGACTG   | 120 |
| AAAACGTAT GTTTAACTAT GCTTAAGTTA ATATTATAG TAATGATAGA AGCCATTTTA   | 180 |
| TTGGCAATAT ATCACTTCCT GATTTCACA CCAGGCATTC CCACATGCAC AAACAGGTGT  | 240 |
| GTGGGAGGAA GGGAAATGGG CAAAATGAT TTCCTTCAAG AGGCTACTGA GAATGAAAC   | 300 |
| TCAAATCTG CACAAATAGG GGTGGTGAA GGAGAGAAAG AAAACTCCAT GCCAGAAATA   | 360 |
| ACATGCTTAG CAGAGAGAGA GAGAGATCTC GAG                              | 393 |

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 262 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AACTCAGTTG GCTTCTAATT TCGTAACAA GATTAAGGTA | 60  |
| GTATTTTGT ACTATTATTG GAAGCATGCC TTCCCTTTT CACATTATTA AATTGTATTT  | 120 |
| ATATTGTGC AATTTTAAAC TATGTTTCA AATAAACTTT GTCTGCGGCT TCGAGGTCTT  | 180 |
| TTCAGGAATC TTCAAATG GGATTGGGG ATCAGAACTC CTTCTGATCA AATGGAATCC   | 240 |
| AATTTGTACT ACTGGTCTCG AG   | 262 |

(2) INFORMATION FOR SEQ ID NO:1016:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 304 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

```

CAGAAATGGGA CTCCAAGCCT GNCTCCTAGG GCTCTTTGCC CTCATCCTCT CTGGCAAATG      60
CAGTTACAGC CCGGAGCCCG ACCAGCGGAG GACGCTGCCC CCAGGCTGGG TGTCCTTGGG      120
CCGTGCGGAC CCTGAGGAAG AGCTGAGTCT CACCTTTGCC CTGAGACAGC AGAATGTGGA      180
AAGACTCTCG GAGCTGGTGC AGGCTGTGTC GGATCCCAGC TCTCCTCAAT ACGGAAAATA      240
CCTGACCCTA GAGAATGTGG CTGATCTGGT GAGGCCATCC CCACTGACCC TCCACACGCT      300
CGAG                                         304

```

(2) INFORMATION FOR SEQ ID NO:1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

```

GAATTCGGCC AAAGAGGCCT AGTTTAAAGA AAAAAAAAAA GACCCATCAA GGGCATAGAA      60
AAGCTTAGGT GAAGAAACCC TAAATGAAT CCTCATTTAT CAACTCATTC ATTTATTGAT      120
TCATTGTGTC ATTCATTGTG TCACTCAAGA AGTATTGTGT GCCAGACACA GTACCAACAA      180
AGAAAATAAG CATCCACTAC GGCTTTGCAG AGCTTGGTAC GCAATGCCTG GTTCAGAGGA      240
GATATTTGTT CATCGCTTGC TTTTAACTGT ATCACAGCCT AGGGTGGCAT GCAGAGGTTT      300
GAATAAGTGC TGAAACAGGA CAAGTGAGGT GCTTATGGAA ACACACAGGC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

```

GAATTCGGCC AAAGAGGCCT AGAAGGAAAT TGTCCCGAAT CCCTGCAGTC TTTCTGTAGG      60
TTGCGGCACA ACGCCAGGCA AAAGAAGAGG AAGGAATTTA ATCCTAATCG GTGGAGGTGCG      120
ATTTGAGGCT CTGCTGTAGC AGGTGGCTCC GCTTGAAGCG AGGGAGGAAG TTTCCTCCGA      180
TCAGTAGAGA TTGGAAAGAT TGTTGGGAGT GGCACACCAC TAGGGAAAAG AAGAAGGGGC      240
GAACTGCTTG TCTTGAGGAG GTCAACCCCC AGAATCAGCT CTTGTGGCCT TGAAGTGGCT      300
GAAGACGATC ACCCTCCACA GGCTTGAGCC CAGTCCCACA GCCTTCCTCC CCCAGCCTGA      360
GTGACTACTC TATTCCTTGG TCCCTGCTAT TGTCGGGGAC GATTGCATGG GCTACGCCAG      420
GAAAGTAGGC TGGGTGACCG CAGGCCTGGT GATTGGGGCT GCGCCTGCT ATTGCATTTA      480
TAGACTGACT AGGGGGCTCG AG                                         502

```

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

```

GAATTCGGCC AAAGAGGCCT AATCAAATAG TAAAGGCTGT TCTGGCTTTT TATCTTCTTA      60
GCTCATCTTA AATAAGTAGT ACACTTGGAT GCAGTGGCTC TGAAGTGCTA ATCAGTTGTA      120
ACAATAGCAC AAATCGAAGT TAGGATTTGT TTCTTCTCTT CTGTGTTTCG ATTTTGTATC      180
AATTCTTTAA TTTTGAAGC CTATAATACA GTTTTCTAT CTGGAGATA AAAATTAAAT      240
GGATCACTGA TATTTTAGTC ATTCTGCTTC TCATCTAAAT ATTTCCATAT TCTGTATTAG      300
GAGAAAATTA CCCTCCAGC ACCAGCCCCC CTCTCAAACC CCCAACCCAA AACCAAGCAT      360
TTTGAATGA GTCTCCTTA GTTTCAGAGT GTGGATTGTA TAACCCATAT ACTCTTCGAT      420
GTACTTGTTT GGTGTGTAT TAATTGACT GTGCACGATC TCGAG                          465

```

(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

```

GAATTCGGCC TTCATGGCCT AGGATTTCGT ATGCAAGCTC TTGTTTCTCA GGCTGCCTGC      60
AGAAGAAGTC GCTATAAATT ATCTGTTGTC TACATGGTAC AAGGCCCAT GACTCATCTG      120
ATGCTTGTTT TGTAAATTC TTAAATATT TTATCACGGG GCAGTGGGAG GGCTTGGGCT      180
TTTAGCCACA GCTGTTTTAA GACTTCTGAT CTCCTGCCCT GCAGGAATAG GTGGCAACTC      240
GAG                          243

```

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

```

CTCCACCGAG AGCCTGGACA GTATGAAGGC TCTGACAGCC GCCATCGAAG CTGCAAACGC      60
CCAGATCCAT GGCCCTGCCA GTCAACACAT GGGCAATAAC ACTGCCACCG TCACCACCAC      120
GACTACCATA GCCACCGTCA CCACGGAGGA CAGGAAGAAG GACCACTTTA AGAAAAATCG      180
ATGCCTGTCT ATCGGGATAC AGGTGGATGA TGCTGAAGAA CCTGACAAAA CAGGGGAGAA      240
TAAAGCACCC AGTAAGTTCC AGTCCGTGGG AGTGCAAGTA GAAGAAGAGA AGTGCTTCCG      300
CAGGTTCACT CGATCCAACA GTGTGACGAC AGCAGTACAG GCCGACCTGG ACTTCCATGA      360
TAATCTGGAA AATTCTCTGG AATCTATAGA GGACAATTCG TGTCTGGCC CCATGGCCAG      420
ACAGTTCTCC CGGATCTCG AG                          442

```

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGATGATCAG GTTTTTCTGG ATGGAAATGA GGTGTATGTA | 60  |
| TGGATCTATG ACCCAGTTCA CTTTAAACA TTTGTCATGG GATTAATTCT TGTGATTGCA  | 120 |
| GTAATAGCGG CCACCCTCTT CCCCTTTGG CCAGCAGAAA TGAGAGTAGG TGTATTATAC  | 180 |
| CTCAGTGTGG GTGCAGGCTG TTTGTAGCC AGTATTCTTC TCCTTGCTGT TGCTCGATGC  | 240 |
| ATTCTATTTC TCATCATTTG GCTCATACT CGAG                              | 274 |

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACTTTCCAG AAACCAAGAG TGGCTCTACT GTGGCTATAT  | 60  |
| TATTATTGTT ATTATTATTA TTTTGAGAT GGGGTCTCAC TTTGTCATCC AGGCTGGAGA  | 120 |
| GCAGTGGCAC CATCATAGCT CACTACAGCC CCAAACCTGCT GTGCTCAGG GATCCTCCTG | 180 |
| TCTCAGCCTT CTCGAG   | 196 |

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AATCATTTAT ATAAAGTTA AAAACATTTC AGAACTGAAC  | 60  |
| TATATATTTT TAGAAATATC TGCATATGCC ACATAAATTT TTAAATCAT AAGAATGCTA  | 120 |
| AACAGCACAT TCAGGACAGG GTGAAGAAAC AGGCATGCAG GTTGTGCAGT AGGAAGCTGG | 180 |
| GTAACATTGT TCCTTATGGC TTGTGTGTCG CTTCAGAAAT TTCATTAAAA ACTTTTAAAA | 240 |
| AAACATGGGC CCACATTATG AATTACGTCT GCTTTTAGAG TACTAAAAAC TCCAGCAAA  | 300 |
| AACACATGAG CCACCGGGCA CGCCTGGCCT TTATTTTATT TTTCTACGTT ATTATTCCTG | 360 |
| TTTTCAGAGG AGGGAATTGT CAGGGAATC TCGAG                             | 395 |

(2) INFORMATION FOR SEQ ID NO:1025:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

```

GGAGAGCTCT GGGCCAGCCC TTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT 60
CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTGTGTGT GTATATATAT ATATATANAC 120
TTTTCCCTTC TGGATGCAAT AGAGCTATTT TTTTCTCTTT GGAATTGAGT GACACCACCA 180
AGATACGTTT TTGGGTTGAA TATGTGTGTT TTCAAATTT CAGTCTGGCC TTTTGTGTG 240
TTGTTGTTGT TGTTCCTTT AGATGGAGTT TCACTCTTGT TGCCCACTCT GGAGTGCAAT 300
GGCACTATCT CTACTCACTG CTACCTCCGC CTCCCAGGTT CAAGCAATTC TCCTGCCTCA 360
GCCTCCCAAG TAGCTGGGAT TATAGGCATG TGCCACCATG CCCAGGCAGT TTTTGTATTT 420
AGTCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1026:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

```

GAATTCGGCC TTCATGGCCT AGAGAACTGG AGCCAGCTGT CAACTGCCCC CGCCCCACCC 60
AGGCCATTGT GCTTCTGCTA CCGGCATGCT GCTCAGGGCT CTGCCCAAGG ACAACGACGA 120
GCCCCCTGTG TCCTCTCCTG GGTCACTCTC CATGACCCCTG AGGCAGCGAA GACAAGCTCG 180
GCAGCTCCCT GAGCTGCTTC ACACCAACTA CCTATGAGTC TGAGGCCAGC ATCCAGGCGC 240
TGCCCAAGCC CTGAGAGTCC CTGGACCATG ACGTAGCCTG TGTGTGAAGG GAGCAAGACA 300
GCCTTGACAG AAGCACAGAG AACGCCACTG GGATTCTTAA AGACGCGAAG GGAATAAGCA 360
CAGAAGATGC TGGCGCTGCA TCTCCTCCAG CACCGAGAGG CCTCGAG 407

```

## (2) INFORMATION FOR SEQ ID NO:1027:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

```

GAATTCGGCC TTCATGGCCT AAATTAATAT CCTTATTTT GCAGATTAGG AAATAAGAC 60
GTACTGAGGC TGGGTGCCTG GTTCAAGATC ATATAGCTAA CATTATTGGA CATGCAAATC 120
AAGCCCAGAT TTGTGACTCT GAGCTGATGT TAATTCTGTC ACAATATTGG TTCTCAAGAT 180
AAATCTTTCC AGGTGAGGGG GAAAGGGAAT AAATATCTAG AAGTCCCCCT AAACAGAAGT 240
AATTAATTCG TTGCGAGAAA TTGGCAAAAT TTGGGGTTCC CTCTTAAAA GTTTCCTTCT 300
GTCACCTGGA AAAAAATTTAA AATATGTGCA TTAGGTTGAC AAAGATCAAA AAAGTTAAAA 360
AAAAACCCCTT TTTGGAATGC TGTGGAGAAA GTAGCACTCG AG 402

```

## (2) INFORMATION FOR SEQ ID NO:1028:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

```

GAATTCGGCC TTCATGGCCT AAGGGGCTGA AATTAAGAAT GTGGCTTTTT TATCCTTTCA      60
AAAATAGATT ATTTGGCTGG ATGTGGTGGC TCACGCCTGT AATCCTAGCA TTTGGGAGG      120
CTGAGGCAGG CAGATCACCT GAGGTAAGGA GTTCAAGACA AGCATGTCCT GGTGAAACCC      180
CATCTCTACT AAAAATACAA AAAATTAGCC AGGTGTGGTG GCAGGTTCCCT GTAGTCCCAG      240
CTACATGGGA GGCTGAGGCA GGAGACTCAC TTGAACCCGG AGTGTCTCGA GGCAGGTCTA      300
GAATTCAATT AGGCCATGAA

```

## (2) INFORMATION FOR SEQ ID NO:1029:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

```

GCAGATTTTC GCTCTCATCC CATATCTATT GAGAATGCTG TAGTTGAGGG TTGTTAGAAA      60
CCTGCATTTT ATTAAATCC CTCCAGGTGA TTCTGATGCA GGCTAGTTCA GTAAACAATA      120
TCAACTAGTT TTCATAAGA AACCTCTGG AGGGCCCATG GTGCCTGCAC TCCAGGTCTC      180
AAGTATACT TTGAGATCTA GGTATCTGCA CAAGGTGCTA TCCTGAAAGG ACTCTAAATG      240
AGACAACCTG AG

```

## (2) INFORMATION FOR SEQ ID NO:1030:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

```

GAATTCGGCC TTCATGGCCT ACCTTATGGC CTAATTAAAT ATTAGTAATA GGTATTCGAT      60
TTGTTTTTAA ATGATTTCTT GTAATAGACT ATTGGGTCAG CTAATACTTT TTTGCATCTT      120
CATATTTTAT GTCATGTTAA TGATAAATTT TCTGACTTTG ATTTGTATGT TTTGGCCCTT      180
TATCCTCTTA GGTGGCCTTG GGGGACTTGC AGGTCTGAGT AGCTTGGGTT TGAATACTAC      240
CAACTTCTCT GAACTACAGA GTCAGATGCA GCATCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1031:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

```

GAATTCGGCC TTCATGGCCT AGAGCAAGTG GTTTTAAAT ATCTTCGAGC TGAACCTGAG      60
GACCATTATT TTTTAATGAC AGAACCTCCA CTCAATACAC CAGAAAACAG AGAGTATCTT      120
GCAGAAATTA TGTTGAATC ATTTAACGTA CCAGGACTCT ACATTGCAGT TCAGGCAGTG      180

```

CTGGCCTTGG CGGCATCTTG GACATCTCGA CAACTGGGCTG AACGTACGTT AACGGGGATA 240  
 GTCATTGACA GCGGAGATGG AGTCACCCAT GTTATCCCAG TGGCTCTCGA G 291

## (2) INFORMATION FOR SEQ ID NO:1032:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

TAAAAATAATT TAACTTTTTT ATTACATTAA AAAACAGGAC TCTGGGAATT GTCACTTTAT 60  
 GATCAGCCTT ATATTTTTTC CAGACTGTGT CATTGTGTAT GCCTGTGCCA CCCAACGGAT 120  
 GAGACCACTG ATCATGTTTA GCTCAAATTT ATGTTGGATA GAGGTTATAG GATGGTCCTT 180  
 ATCTGAATGC AGAAAGGAAT GTTTATTTTG CTGTTATGTT TTATATGGGA TAATACTTTA 240  
 TAATTGTGTG ACTATCCTAT TCCCCAACAA ACTCGAG 277

## (2) INFORMATION FOR SEQ ID NO:1033:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTCGGCC TTCATGGCCT AGGTTACATG TATAAAATAA TCGTAGCTGT TAATCAAAC 60  
 GATCATTGTC TATTTGTTGT TTCACATGTT TTCATTTATT TGTTCAATCA GCAAACACTT 120  
 AGTTGTGTGC CAGGAATTAA AATCCAGTGT TGTCTTTTC TTATTTTTT TTTGGCTAGT 180  
 GGAAAATGAA AACCACGTG ACTTTGTAA GCTGCGGGAA ATGCTCATT GTACAAATAT 240  
 GGAGGACCTG CGAGAGCAGA CCCATACCAG GCACTATGAG CTTTACAGGC ATCTCGAG 298

## (2) INFORMATION FOR SEQ ID NO:1034:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCGGA AGACACTGAC TGACTGGAAG ACCTGGATTT CTTTCTGGAA GACACTGATT 60  
 GACTGGAAGA CCTGGATTTT TTTCTGGAAG AACTGATTG ACTGGAAGAT CTAGATTTT 120  
 CTGGAAGAAC TAGATTACT GGAAGACTTG GATTGGTGG AAGACGTAGA TTTTCTGGA 180  
 AGACACTGAC TGACTGGAAG ACCTGGATTT CTTTCTGGAA GACACTGATT GACTGGAAGA 240  
 CCTGGATTTC TTTCTGGAAG AACTGATTG ACTGGAAGAT CTAGATTTT CTGGAAGAAC 300  
 TAGATTACT GGAAGACTTG GTAGGCCATG AAGGTCGAG 339

## (2) INFORMATION FOR SEQ ID NO:1035:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

```

GAATTCGGCC AAAGAGGCCT AGCACTGTAA AGATGAAGCT GGCTAACTGG TACTGGCTGA      60
GCTCAGCTGT TCTTGCCACT TACGGTTTTT TGGTTGTGGC AAACAATGAA ACAGAGGAAA      120
TTAAAGATGA AAGAGCAAAG GATGTCTGCC CAGTGAGACT AGAAAGCAGA GGGAAATGCG      180
AAGAGGCAGG GGAGTGCCCC TACCAGGTAA GCCTGCCCCC CTTGACTATT CAGCTCCCGA      240
AGCAATTCAG CAGAGATCTC GAG                                         263

```

## (2) INFORMATION FOR SEQ ID NO:1036:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

```

GAATTCGGCC AAAGAGGCCT AAAGCACCCG CTTCTCACC ACCCCCACTG TTGGGCCTAT      60
AGTAGCAGGT TAGTGAGTAC CTAGGGCGGC TCAACTCCTC CCACAGCACC AACCAGCAT      120
GGTCCCACTG AAGTCCTACT ACGCCCTCCC CTCCCAGCC TTTCCAGAA ACCATACTGG      180
GCTCAGATCA GAGCTCCGAA GCGGTCAAAG TGAGCTGAGC AGGACAGGCC CAGCCTTTCT      240
CCACTGCCAC GTCACCCTCG AG                                         262

```

## (2) INFORMATION FOR SEQ ID NO:1037:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

```

GAATTCGGCC AAAGAGGCCT ACGGAGCTGT CAGCCAGGGG AGTGGGGTCA GCCGTCAGCC      60
AGCCCTCCCG TTCCCGCCC GTGGGCCCTG ACCACACTCC CTTTCTAGA AGTCAATCCT      120
AAGGTTTCTC TGCTCTGGCT AAGAGGATGT AAATTGGAT TCTTAGAGGG CATGGCACCC      180
CCAGTCCCTG CCCAGATAAA GTAGCACAGT GGCATGCAGC ACCTCTGTCT GTTGCTGACG      240
TTGGGGGGCT TACACACCCA CCTCATCTCC GTGCACAGAC TCGAG                                         285

```

## (2) INFORMATION FOR SEQ ID NO:1038:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

```

GAATTCGGCC TTCATGGCCT AGCTCTGCAA GGAAGAGAGC TTCACGTCTC TGGTCAGCCA      60
AGCGAGGCTG TCTCTCCAGC TCTCAGAGAG CTCTCGGGGC TCTCCTGCAG GAGACCAGGC      120
CAATGCTCCT GTGCTTCCTG GGGCCAGTAG CAGCACCCCTG AGCTCCCTGC CACCAGGCAG      180
CTGAAAGGCA TAGCGTGAGG TGCTTCTCTC AGTCCCAATT ATGACAGTGG CCACCGGAGA      240
CCCAGCAGAC GAGGCTGCTG CCCTCCCTGG GCACCCACAG GACGCCTCGA G              291

```

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

```

GAATTCGGCC TTCATGGCCT AACTCTACAG CAGTGCTTAT TTTTACATTT CCAAGCGAAT      60
ACCAAAACCT TCAGCAAAGA TTGGGTGGT ATTAACGGGT TTTTGTCTCA GAACTGTATT      120
GTGGATCCCG GAGTTTCCCC CAAATCCATC TACATCAAAT TTGTAGAAGT AGAGAGGGAT      180
TTTCTTTCCG CAGGCTCTTT AGTTGAGTGC CTGGAAAAAG CCATTGGATA CCCCTTAAAA      240
TTTAACAACCT GAATGTCATC CTTCATAAGG ATTTGGGCTC TTAGCTCCTT CTTCTCTACT      300
CACTTCCCAT TACCCGGACC ACCCCTCATC CAGATGCCGC CGTCAGACTC TTCATGGAAA      360
CCCTTTCTTC AATTGGGCCA GTACGATCTC GAG              393

```

(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

```

GAATTCGGCC AAAGAGGCCT ACCCTACTGT GACACACCTA CCATGCGGAC ACTCTTCAAC      60
CTCCTCTGGC TTGCCCTGGC CTGCAGCCCT GTTCACACTA CCCTGTCAAA GTCAGATGCC      120
AAAAAAGCCG CCTCAAAGAC GCTGCTGGAG AAGAGTCAGT TTTTCAATAA GCCCGTGCAA      180
GACCGGGGTT TGGTGGTGAC GGACCTCAA A GCTGAGAGTG TGGTCTTGA GCATCGCAGC      240
TACTGCTCGG CAAAGGCCCC GGACAGACAC TTTGCTGGGG ATGTACTGGG CTATGTCACT      300
CCATGGAACA GCCATGGCTA CGATGTCACC AAGGTCTTTG GGAGCAAGTT CACACAGATC      360
TCACCCGTCT GGCTGCACT GAAGAGACGT GGCCGTGAGA TGTTTGAGGT CACGGGCCTC      420
CACGACGTGG ACCAAGGGTG GATGCGAGCT GTCAGGAAGC ATGCCAAGGG CCTGCACATA      480
GTGCCTCGGC TCCTGTTTGA GGAAGTGGCT TACGATGATT TCCGGAACGT CTTAGACAGT      540
GAGGATGAGA TAGAGGAGCT GAGCAAGACC GTGGTCCAGG TGGCAAAGAA CCAGCATCTC      600
GAG              603

```

(2) INFORMATION FOR SEQ ID NO:1041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ATAGAAACAT CAGTGGGCAC ATTTACAACC AGAATGTATC | 60  |
| CCAGAAGGAC TGCAACTGCC TGCACGTGGT GGAGCCCATG CCAGTGCCTG GCCATGACGT | 120 |
| GGAGGCCTAC TGCCTGCTGT GCGAGTGCAG GTACGAGGAG CGCAGCACCA CCACCATCAA | 180 |
| GGTCATCATT GTCATCTACC TGTCCGTGGT GGGTGCCCTG TTGCTCTACA TGGCCTTCCT | 240 |
| GATGCTGGTG GACCCTCTGA TCCGAAAGCC GGATGCACAC ACTGAGCTCG AG         | 292 |

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

|   |     |
|---|-----|
| GAAGAAAAGC AGAAAGAACT GGCAGAAACA GAACCCAAAT TCAACAGTGT GAAAGAGAAA | 60  |
| GAAGAACGAG GAATTGCTAG ATTGGCTCAA GGTACCCAGG AAAGAACGGA TCTTTATGCA | 120 |
| AAGCAGGGTC GAGGAAGCCA GTTTACATCA AAAGAAGAAA GGGATAAGTG GATTAAAAAG | 180 |
| GAAGTCAAGT CTTTAGATCA GGCTATTAAT GACAAGAAAA GACAGATTGC TGCTATACAT | 240 |
| AAGGATTGG AAGACACTGA AGCAAATAAA GAGAAAAATC TGGAGCAGTA TAATAAAGTG  | 300 |
| GACCAGGATC TTAATGAAGT CAAAGCTCGA G                                | 331 |

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 268 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

|   |     |
|---|-----|
| GATGGCCACT TCCCAGGCTG ACATAGAGAC CGACCCAGGT ATCTCTGAAC CTGACGGTGC | 60  |
| AACTGCACAG ACATCAGCAG ATGGTTCCCA GGCTCAGAAT CTGGAGTCCC GGACAATAAT | 120 |
| TCGGGGCAAG AGGACCCGCA AGATTAATAA CTTGAATGTT GAAGAGAACA GCAGTGGGGA | 180 |
| TCAGAGGCGG GCCCACTGG CTGCAGGGAC CTGGAGGTCT GCACCAGTTC CAGTGACCAC  | 240 |
| TCAGAACCCA CCTGACGCAC CCCTCGAG                                    | 268 |

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 391 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

```

GTCATTGCAT CCAAGATAAT GAAATATCTA TAACCCCAAA AGTTTCCTGT GTCCCTTGT      60
TATTCATTGC CCTGCCAGT ATTCAAGCAA CACGGATCTG TTTTCTGTTT TAGGTTAGTT      120
TGCATTTTCT ATAAAGTCTT ATGAATGAAA TAATAAAATG TGGACTATTT TCATGGGCCG      180
GGGAGCAGTG TGGCTTCTTT CATTCAAAT GATTGTTTTG AAATTCATCC ACAGCGTTGC      240
ACGTATCAGT AGTAGATTCC ATTTGATTGT TGATTTGTAT TCTATTGTAT GCCTGAGTCA      300
AAATTATTTC ATCTCTTGT CTGTGATAG CCATTTGGGT TCTTCCAGTT TGGGGCCATT      360
ACAAATAGAG GTACTATGAA CTTTCTCGA G                                     391

```

## (2) INFORMATION FOR SEQ ID NO:1045:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

```

GAATTCGGCC TTCATGGCCT AATGTGAGCC ACCGCACCCA GCCGAATATT TGTACTTTGT      60
ATAAATTCAT TGTCTGTTT ACAGTTTGAA TGGCTCTTTT ACCCTGGCAT AATTTGTAA      120
CGTGTGGAGC ATTTGGAAAA TTTTATTGG ATTATGCAGA TATTTTCAAT GCTGGTATTT      180
CATTATATGA TAGTAAAAA TCACTTTTTG TTTTGTGTTT TTTTGTGTTT TTTTCTTTT      240
TTTTTGAGGC AGAGTTTCGT GCTGTGCGCC CAGCCGAAGG CGCTCGAG                288

```

## (2) INFORMATION FOR SEQ ID NO:1046:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

```

GAATTCGGCC TTCATGGCCT AGTAACTTCA TAACATTGCT GGTGTTGAGG TGAATCTTAG      60
TGGTCATCCA GTCCCAAGGC ATCCTTGCCA GCCCCTACA ATACCTGGAT GGGCGCTTAT      120
CTTCAGGTAG GCCTGAGCCT TTCTGGTAAA GAGGAGCTCA CTATTTCTAA AGGAAACCTG      180
TGCCATTGGG TTAAAAAAGT ATTAATTTT AAACATTGGT AGTTGTTAAG CAGTTGTTGA      240
ATATTTTGAG CCAAATTTG TTACCTCCCA TACCTCGAG                                279

```

## (2) INFORMATION FOR SEQ ID NO:1047:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

```

GAATTCGGCC TTCATGGCCT AGCAGCATTG AAGGAATTAA TATTAGTCAC TGAGAACAAA      60
AAGCGAAATT AGAAAATTTC AAGTCACTTC TAGGCTTGTA GGGGAGAAGA CGTGTAGTGA      120
TGAATTCTAT CATTATGAA GTACCCACTG GATCCACAC ACTGTGCAAG ACCTTTAGAT      180
CAGGCGCCTC CCTCGGTTT CTTCAACCCTG TGCAGCAGGT GCTGTTATTT CCTTTTAA      240
ATTATTATTT ATTATTATTA TTTTGTGAGA CAGGATCTCC CTTTGTCACT CAGGCTGGAA      300
TGCAGAGGCA TGATCACTGC TCACTGCAGC TTCGACCACC CGATCTCGAG      350

```

## (2) INFORMATION FOR SEQ ID NO:1048:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

```

GAATTCGGCC TTCATGGCCT AAAGCTTTTC AGTACTGTTT ACAAATTGG TTTTATTGTG      60
TCAACTTAAA AGCATGAGTC TAAATCTATT AGTCATACCA AATTGTTTCA TTTTATTTTA      120
TTTTATAGAG ATGGGGTCTT GCTGTATTGC CCAGGCTGGT CTCAAACGAC TAGGCTCAAG      180
CGATCCTCCC ACCTCAACCT CCCAAAGTGC TGGGATTACA GGTGTAAGCC ACCATACACA      240
GTTCTCAAAT TATTTTATAC AATACAAACA TTAAATATAT AAATCATGCA CTCTCGAG      298

```

## (2) INFORMATION FOR SEQ ID NO:1049:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

```

GAATTCGGCC TTCATGGCCT AGAGCTTTGG TGCTTTTCAC ATAAGGAACT TACTTGGGCT      60
AAAAAGTAAC CTCAGAGAAA CAGTGCTCCC ATTTGGTGGA TAAGGAACT GAGGTTCCTAA      120
ACATGAGATG TAATAGCTTG CCCCAATCT AGCCAGTGAG CAAGAGAGTA GACTTTTGCC      180
TGTGCCAAA CAGTAATCAC CATCCACAAG TGGCTATTTA AATTTTAATT ATTACAATTA      240
AATAAAGTTT AAAATCCAGT TCCCAGTCC CACTGGCAAC TTAACAGCTA CCAGTGACTG      300
TACCATATAT AACAGCATAT ATAGACATAC AGCATATACA ACACATACAT AGGGATTCCC      360
ACTCGAG                                     367

```

## (2) INFORMATION FOR SEQ ID NO:1050:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

```

GAATTCGGCC TTCATGGCCT ACAATTTTAA AATTAAAATT TTTTCTATTT TTTTGCAATT      60
ATCAACCTAA CACATTGAAG AAACCTGGGA AATATAGAAA AAACACACCA AAAAGTATCA      120

```

```

GAGTTACACT AAAATGTTCA TAGTCAGTAA TATAGTCTTT CAGATTTTTT TTTCTGTGTC      180
TGTCTGCTGT CTATGTCCAT GCCTACCTTA CTTTCTTCCC TCTCTCTCC CTCCCCACCC      240
TCCCTTCCTT CCTTCCCTCC TTCCACCTT CCCTGCTTCC TTCTTGCTG CCTCCCTTCC      300
TGCCTGCCTC CCTTCCTGCC ACTTACATTG TGTTAACAAT GAGAAAAAAA TTCCCCCATC      360
ACTCGAG
367

```

## (2) INFORMATION FOR SEQ ID NO:1051:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

```

GAATTCGGCC AAAGAGGCCT AAGAAGACCT CAGCCTTCGC CTGAAAAGC TGACTCAGGC      60
TGCCCCCTGC ATGCTGTTCA TGAAGGGAAC ACCTCAAGAA CCACGCTGTG GTTTCAGCAA      120
GCAGATGGTG GAAATCCTTC ACAAACACAA TATTCAGTTC AGCAGCTTTG ATATCTTCTC      180
AGATGAAGAA GTTCGACAGG GGCTCAAAAC GTACTCTAAT TGGCCCCACCT ATCCTCAGCT      240
CTATGTTTCT GGAGAGCTAA TAGGAGGACT TGACATAATT AAGGAGCTGG AAGCATCAGA      300
AGAGCTGGAC ACGATCTGTC CCAAGCACC CAATCTCGAG
340

```

## (2) INFORMATION FOR SEQ ID NO:1052:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 444 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

```

GAATTCGGCC TTCATGGCCT ACTATGGACA GCCACAGNTC TTCCAGGAC AAGACCCTGA      60
CTCACCCAG CATGGAACT ACCAGGGAGG GAGGGTCCCC CATCCTACTA TGACAACCAG      120
GACTTCCCTG CCACCAACTG GGATGACAAG AGCATCCGAC AGGCCTTCAT CCGCAAGGTG      180
TTCCTAGTGC TGACCTTGCA GCTGTCGGTG ACCCTGTCCA CGGTGTCTGT GTTCACTTTT      240
GTTGCGGAGG TGAAGGGCTT TGTCCGGGAG AATGTCTGGA CCTACTATGT CTCCTATGCT      300
GTCTTCTTCA TCTCTCTCAT CGTCTTCAGC TGTGTGGGG ACTTCCGGCG AAAGCACCCC      360
TGGAACCTTG TTGCACTGTC GGTCTGACC GCCAGCCTGT CGTACATGCT GGGGATGATC      420
GCCAGCTTCA ACAACACACT CGAG
444

```

## (2) INFORMATION FOR SEQ ID NO:1053:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 358 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

```

GAATTCGGCC AAAGAGGCCT AGATATTCAT TTCCATTGGA GCTGGTATT TTAAGGTCTC      60

```

```

GTGACGTCAG TGACCTCATT TTA CTGATC TATTAGCAGC ATTCATACA GTTGTGACT      120
CTTCTCCATT AAAACATTTA CTTTATTGG CTTCTAGGAA ACATATTTTC CTGCTTTTTC      180
TTCCTATTTT TCTGACTCTT TTCTCAGTTT CCTTTGCTGT TTCTTTTCT ATCCTCTAAA      240
CATTGAAATA TCCTAAGCCT AGTTTGGGAT TCCCTTGATG GTCTTCATT CTTTAATGGG      300
AACTGTGCTG GTGACTCAAA TTTATATCTC CAGCCAGAAC CTTTCTCCTG AATTCAG      358

```

## (2) INFORMATION FOR SEQ ID NO:1054:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

```

CCTTCATGGC CTACTTCTGG TATTACATCA CACTGATCAT GCTGCTGGTG GCCGTGCTGG      60
CCGGAGCTCT CCAGCTGACG CAGAGCAGGG TTCTGTGCTG TCTTCCATGC AAAGTGGAAT      120
TTGACAATCA CTGTGCCGTG CCTTGGGACA TCCTGAAAGC CAGCATGAAC ACATCCTCTA      180
ATCCTGGGAC ACCGCTTCCG CTCCCCCTCC GAATTCAGAA TGACCTCCAC CGACAGCAGT      240
ACTCCTATAT TGATGCCGTC TGTACGAGA AACAGCTCCA TTGGTTTGCA AAGTTTTC      300
CCTATCTGGT GCTCTTGAC ACGCTCATCT TTGCAGCCTG CAGCAACTTT TGGCTTCACT      360
ACCCAGTAC CAGTTCCAGG CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1055:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

```

CGATTGAATT CTAGACCTGC CTGTGCTCCT CGATGGTGTG TCTCCCTCCA GAAAACGCAT      60
GCTTATTGAC CTTGGTTTGG ATCTGCTTGG CCGTGTGCTG CGAG      104

```

## (2) INFORMATION FOR SEQ ID NO:1056:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 650 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

```

GAATTCGGCC AAAGAGGCCT ACACAAGGCT AAGGGTATTG GATATAACGG AAAGTGGAAG      60
CTATACCTGA CTCCAGAGA ATGTGGACCG GATATAAGAT CTAATCTTC TCTTATCTTA      120
CTACAGAAAT CTGGATGGAG AAGCAGTATT TATCTCAAAG AGAAGTGGAC CTAGAGGCTT      180
ATTTCACTAG GAATCACACC GTTTTGCAAG GTACTCGATT CAAAAGAGCC ATTTTCCAAG      240
GGCAATACTG TAGAAATTTT GGCTGTTGTG AAGACAGAGA TGATGGCTGT GTCAGTGTG      300
TCTATGCGGC GAATGCGTTG TGCTACTGTG ATAAATTCTG TGACAGAGAA AATTCTGATT      360

```

GCTGTCCTGA CTACAAGTCC TTTTGCCGTG AAGAGAAAGA ATGGCCTCCT CACACACAGC 420  
 CTTGGTATCC AGAAGGTTGC TTCAAAGATG GTCAACATTA TGAAGAGGGA TCAGTAATTA 480  
 AAGAAAACGT CAACTCCTGC ACATGCTCAG GACAGCAATG GAAATGTTCC CAGCATGTAT 540  
 GCCTTGTTTC TCCAGAATTA ATTGAACAGG TCAATAAAGG AGACTATGGA TGGACAGCAC 600  
 AGAATTACAG CCAATTTTGG GGAATGACTT TAGAAGATGG ACTCCTCGAG 650

## (2) INFORMATION FOR SEQ ID NO:1057:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

GAATTCGGCC AAAGAGGCCT ACACGTATTG GCCAGGATGG TCTTGATCTC CTGACCTCAT 60  
 GATCCGCCGG CCTTGGCCTC CCAAAGTGCT AGGATTACAG GCGTGAGCCA TCGCGCCCAG 120  
 CTGAGAATAG TTTTAAGAAT TGGTTGAGAG GCAGTTGCTT TTTCTTTGAA TATCTAGAAC 180  
 TGTTCGTGAC TAACGTCAA GAAACACCAT GGCAACATTA AAGGGAAGAT TATTTGAGAG 240  
 GCGGGGGATA GTATGGCTTA GGAATTGGGC TGCTACCTTT GACTTTGTAA TTCAAAGAT 300  
 TGTAATGTTT CATATTTTCA ATCTGATCAT TAAAAATATC TGTGTTACAT GCAAAAAAAA 360  
 ACCTATAGGC AACTCGAG 378

## (2) INFORMATION FOR SEQ ID NO:1058:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

GAATTCGGCC TTCATGGCCT AATTTTAACA TTTACATAGA CAATTCATTT GGTGTTTTGT 60  
 CTCCTAGTAA TTTGGCCCAA TCTCTGATGA TTTCCACTCT GTCTTGCCCA CTCACCTCCG 120  
 TTGTCATATC TTGGCCATTA TCATCACCTC AAATTGCTCC ATCTTCAAAA TACTTGCATC 180  
 TTATTTATTG ACCATATTCC TTCCACTTGG TTTATTGAAC TATTCCTCTC ATCATTCTCT 240  
 GATTCACTG CAGCCAATG 259

## (2) INFORMATION FOR SEQ ID NO:1059:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

GAAAAAAAT ACTAACCCT GCAAGCTCTT GTCAAATTTT AGTTTAATTG GCATTGCTTG 60  
 TTTTGTGAAA CTGAAATTAC ATGAGTTTCA TTTTCTTT GAATTTATAG GGTTAGATT 120  
 TCTGAAAGCA GCATGAATAT ATCACCTAAC ATCCTGACAA TAAATTCCAT CCGTTGTTTT 180

TTTTGTTTGT TTGTTTTTTC TTTCCTTTA AGTAAGCTCT TTATTCATCT TATGGTGCAG 240  
CTCGAG 246

## (2) INFORMATION FOR SEQ ID NO:1060:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 103 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGCC TTCATGGCCT ACGAGAGTAT ATTGGTAGGG CTGGAATTTC TGTTTCATAT 60  
GGTAACTAAC TCTATGTTGA ACATTTTGAG GAGCCCTCTC GAG 103

## (2) INFORMATION FOR SEQ ID NO:1061:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

GAATTCGGCC TTCATGGCCT AAAAGGTTAG GCAATCACTG GGACCCGCAT GGTGTTCTCT 60  
CAAAGAATAG GGTAAAGGAG AGCTGGGAGG GAGCCCTCTC CGTTGGGTGA CTCTTGTTGTG 120  
CCCTTTAGAC AGGCTGGCCT GCCGGTTCCA CAGGGTACAG TTAGGACTTG AGTCTTTCTT 180  
TTTCTGTTTT GAGTTGGTGA GTGAGTGATA GGGTAACATG GGCCTTCAGG ATGACCCCTT 240  
GGAACCTGTGCG CGAGTTCCTT AAATCTCAGC TGGGATCCTG GACCTGGGAG GCCCCTGTGA 300  
GGGCCAGCTC TGGAAAAACC TGGGAGTTGA TGCCGGAGGC TGTGGAAGAA CTCTGCTCGA 360  
G 361

## (2) INFORMATION FOR SEQ ID NO:1062:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 292 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

GAATTCGGCC TTCATGGCCT AAGAAAAAT GGAACAAGC TAAGTGCCCA CATAGTTACA 60  
AAAATTACGT TAAATAGATA CACGGTTGCT TTAAAGCTCC ACATACAGCA CCATAGAGCT 120  
TTTTATATAT TTGTAGGCAT TAAAGCAATT CCAGGAAGGA TCTAAACCAA ACACTTGACC 180  
CAGGTTGTCT CTCTGGGGAG TGGAGCCACA TGGGATTTC CTGTTTCTGT ATTCTTATTA 240  
CTTATATTAA AACACACATG AACAGAAGAA AAAATAGCCC CAGTATCTCG AG 292

## (2) INFORMATION FOR SEQ ID NO:1063:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

```
GAATTCGGCC TTCATGGCCT ACCGTGTTA CACTTCTGGA CACAAGTTGG GCCGAAGTAA      60
GCCAAGCCCA GTCCTTCCTG TTTCCTTTCT CAGGAAATGT GACCACGTGC ACTGGGAAGC      120
TTTGTGTAAA GTAGATAGGG GTATGAGCCA ATTGCCCAGC ATTGGTGTTT TGTTTTTTGT      180
TTGTTTGTTC GTTTTCACAG AGTCTTGCCC TGTCAACCAG GCTGGAATGC AATGGCGTGA      240
TCTCAGCTTA CTGCAACCTC TGCCTCCAG GTTCACACAA TTCACCTGCC TCAGCCGCCT      300
GAGTAGCTGT GATTACGGGC ACCGTCTCGA G                                     331
```

(2) INFORMATION FOR SEQ ID NO:1064:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 136 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

```
CGAGTGTTAC ATTCGTTCTT CCGCTCAAAT CCTGATCTGG TCCATTAAAG AGTGTTCGCA      60
GACAAAGTTT CTGAAAGATT AGAGAAGAAT CCCCCAAGAA TCAATTACAA CCAAAATGGA      120
AAGGGACAAC CTCGAG                                     136
```

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

```
GAATTCGGCC TTCATGGCCT AGAATAAAGG AAAATTCAGG TCATAGATTG AGTGCTATAT      60
TTGAAGTAAA TACAGACCTT CAAAAAATA TAATATCAAA AATCACTGCT GAGCTCTCCT      120
GGCCTTCCAT ACTTAGCTCA CCCCAGCACT TGAAATTTC ACTTACTAAT ACAAACTGCT      180
CCTCAGAAGA AGAGATTACT TTAGAAATC CTGCAGATGT TCCTGTCTAT GTTCAGTTA      240
TTCTCTGGC TCGAG                                     255
```

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

```

GAATTCGGCC TTCATGGCCT ACAACCTGCT TTCCACCTTC TGTAATCTCC CATCAGTGAT      60
AAATTACCCA TCAGCTTTCC AGATTCCAGA ATTTTGCTGA CATCTCCTGT TGGCTATGTT      120
CTTATTTCCT TTTCTGTTTA TTCCTGTGAC CTTGTGCCCT TTAATTCTTT CCCATAATTT      180
GTTGGGACTT CAGAAGGAAG TGGAGCTAAA GGCATGTGTC TGCCTGCCCC ATCTTGGCTG      240
GAAGTTGGGA AGGCCTTCCT TCCAAGGCAC CCAGCATAGC ACCTGGCACA TGATGGATGC      300
TCAGCAAATG TCTGTGGGTC TTCTTTTAC TAAACAGGCA GTTGATTCA CCAGAAGTAG      360
TGACCACCTA AGTCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1067:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

```

GAATTCGGCC TTCATGGCCT AACACAGCTC ACATCAGAAT ATAATAGTGG AACTAGGGTG      60
ACTTCACTCC CTTTCACCTG ATGTCTATCT TGGCCTTTTA GCACCTTGAC TATCCCTGAA      120
AAGACTGGGT CTTTGTTTTC CCAGGGAAAA AACGAAGTGA TGTAGATCTA AGAAATAGTG      180
CCTCTTTAAT ATTTAATTCT TACATGACAA CTAACACACA GGGAAAAGGC TATGTTAAGT      240
TGATTATAGC TCCTCTTAAA ATGTCCTATG CTGTCAGTTG GTCTTAGAGA CATGGGAATA      300
ACCAAGCAAT CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1068:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

```

GCGATTGAAT TCTAGACCTC ACCTCTGATC TATCTCTTTT ACCTCAGCAA TTTATTTCCT      60
AATTATTATA TCTACTTTAT TGTTCTTATG AGACAATAGA CTATGATAAT TTTCCAGAAA      120
TAATTTTGTT TTCTTCCTCC CATCTTCTAA TGTGAGACC GTTCTCTGT TTTCTTTCAT      180
CTCTACCCCT CAGTCTCATA GGTTCATTTT TCATTTCCTA TCCAGCGATT TCAAAACCTG      240
TACAACAAAC CAACTCAGCA GCCCTTGGCA ACTTGAGGAG ATTTACACAA CCACTCGAG      299

```

## (2) INFORMATION FOR SEQ ID NO:1069:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

```

GAATTCGGCC TTCATGGCCT ACCATTTCCTA CAACCATTTT AATCTGCGCA TCGGTCCCAG      60
ACGTAGGGAT TCCTCGTCTC ATCTTGGAAG CATTGCCAGC AGTGGTCTG ATTTGGAAGC      120
CTGCGTCTGT CACGTGACAC CGTCTGAGCC TGTGCCCTGCC TCTCTTTCTT CCGGCAGTGC      180
CCTGTACTCT GTGGGGATGA CGGCAGTGGG CCTGGCCATC CTGTGGTATG TTTTCCGTCT      240
GGCCGGGAGA CTCGAG                                         256

```

## (2) INFORMATION FOR SEQ ID NO:1070:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

```

GAATTCGGCC TTCATGGCCT AGCCATCATG TTTATTAGAA GGTGGATTT TGGTGTGTGC      60
TCTAGACAGA TACAGAATAA ATACCTGCGC CTTGAGAACA GGAAGTCCAC GATTTCATACA      120
AAGTGCTCAC TACAGGAAGT TGCTGTGTCA AAATCCAGGC AAGGACCCAA CTCGGGGCAG      180
CCCCTCCTCC CTGCTGACCT CAACAAGGGC TGTGCTATTG TTTTATTATT TATTATTTTA      240
TTTCTCTTAA TTATTATTAA TATTATTATT ATTTGCTTTT GCTGTGGTCA CTATCATTTG      300
CAAAGTTCCT TTTCCCTCGA G                                         321

```

## (2) INFORMATION FOR SEQ ID NO:1071:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 261 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

```

GAATTCGGCC TTCATGGCCT AGGGAGGTAT TTGTCATTGT GAAAAGCTGG GAATCTCAAA      60
CATAGTCAAC TTAACATAAA AGAAGCTAAT ACAGGTTGAG CATTCTAAT CCAAAAATCC      120
AGAATCCAAA TTGCTCCAAA ATCTGAAACT TTCTGAATGC TGACCTGATA CTACAAGTAG      180
AAAATTCCAC ATACAAGTAC TTAACACAAA CTTTGTTTCA TGCACAACT ACTAAAAATA      240
TTGTATAAAA TTAACCTCGA G                                         261

```

## (2) INFORMATION FOR SEQ ID NO:1072:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

```

GAATTCGGCC TTCATGGCCT ACTTGGGCTC ATTTTATTTG GTGAATTGA TCCTGGCTGT      60
GGTGGCCATG GCCTATGAGG AGCAGAATCA GGCCACCTTG GAAGAAGCAG AACAAAAAGA      120
GGCCGAATTT CAGCAGATGC TCGAACAGCT TAAAAAGCAA CAGGAAGAAG CTCAGGCAGT      180
TGCGGCAGCA TCAGCTGCTT CAAGAGATTT CAGTGAATA GGTGGGTTAG GAGAGCTGTT      240

```

GGAAAGTTCT TCAGAAGCAT CAAAGTTGAG TTCCAAAAGT GCTAAAGAAT GGAGGTCCCT 300  
CGAG 304

## (2) INFORMATION FOR SEQ ID NO:1073:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 397 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

GAATTCGGCC TTCATGGCCT AAAAAAGCTA ATGTCATAGG TCTTTATATG TGGGCAGGGT 60  
TTATAAGTTG TCTAAGGGC CATCAGGTAG AGTTGGCCTT TTCTGTTGAG GTCCCCATAA 120  
TTTCAGTGGA GGTCTTCTCT TTGGGGCCAG TTTCTCTAGA AAACCTGGGTC CTGATAGTAG 180  
GGTAAGAAAA GACAGCTGAG GACCCCAAGA TTTGTATGAT GACTTTTACT TAATCCCTCT 240  
ATCTTCATCC TCTCTCATGC CCATCCGGCC CCACCCCCA AATCCTCCTC TGGCTGCTGA 300  
CCCTCAGGTT CAGTTTTTCC TGTCAGTGA GGTGAGGGT GGGCGTAGG CTGGCTGTGG 360  
AGAGTAGGGG AGAGGACCTG GGTCCAGTA GCTCGAG 397

## (2) INFORMATION FOR SEQ ID NO:1074:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 309 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

GCGATTGAAT TCTAGACCTG CACCACTGCG ATCCCTACGC CTGAGGAAAT GACAAGATTG 60  
AGAAGCATGA ACAGACAACT CCAGATAAAT GTTGACTGTA CACTGAAAGA AGTTGACCTC 120  
CTTCAATCTA GAGGAAACTT TGATCCAAAA GCCATGAATA ATTTTATGA CAACATAGAA 180  
CCTGGCCCAG TTGTACCACC CAAGCCATCT AAAAAAGACT CCTCAGACCC CTGCACAATT 240  
GAGAGAAAAG CCCGAAGAAT TAGCGTGACC TCCAAAGTAC AGGCAGACAT CCATGACACC 300  
CATCTCGAG 309

## (2) INFORMATION FOR SEQ ID NO:1075:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 243 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

GAATTCGGCC TTCATGGCCT AGAAAACTAA ACATTTGCCT TTTATAAAGA CTGACAAAAT 60  
ATAAATCTTT ATTCTAACCC TATCCCCAAA ACTAGCCAGG CCACACCCCA GATGTTCTTA 120  
TTGACTATTG GGAAGATAGA AAAGGCGTTG TGTTTTTTGT TTTTGTGTTG TTGTTGTCAT 180  
TGTTGTTTTT TCAGAAGACC AGTGTCTCAG TTCTGTCTTA GTAGTACCAC ACCACGACTC 240  
GAG 243

## (2) INFORMATION FOR SEQ ID NO:1076:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

```

CTCGAGCTGG GGGCCACTTT GGCACCTAAC AAAACCAGAG AAAACAAGTG CAACTAAGCA      60
AGCAACTATG CACATTCCAG ACATAAAGAT CATTAAATAAA CGCCTTAATC TAAGGATCTG     120
TTGGTTCTAA CGCCAGAAAA AGAAGTTAAA TTTTAAAAAA TATCTAAAAG AGATTTTAAG     180
TGGGCAAGCA ATAGAGAAGA TACCAACAC TGAGAAACGG AAAGGAAAAA AGACCACCCT      240
AATAACTACT GCTCATCAAT ATACATCTAT AATTCTACCA GAACAGTATT AAGAAATGAG     300
AAACGCCAAT ATTACATAAA ATAAGGTAAA AATAACTAAG CATAGGTTAG TGTCAGGGGA      360
CCTAGGGTTC AGACACCCAG AGTTTATAT AAGGATAATT TGTCTGAAT CAAGACCACA      420
CTGTCCTCTC CTTAAACCTA ACTGCTACAA GCAGACACCA CCTCTTCTGA CTGGGCTGAA      480
GTGTGGGAAA CAGTCCAAAA ATTAGGTATC ACACCATAAA CCCTCCACAA GAGCAACCTT     540
TGCTCTCAAT TAAGTTGTTG ACAAATAAT TCTCAACTTG CCTAGGCCTG CCGAATTC      598

```

## (2) INFORMATION FOR SEQ ID NO:1077:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

```

GAATTCGGCC AAAGAGGCCT AGGTGGGTAT TTGAATGGTT TTGCTCCAAA ATTGAACTCA      60
CATTGTTGAT ATGACATGAA ACTAGCTGCA GCAAAAAATC CAGATACAGT AGATGAAAAG     120
ACTTGCTTTT CAGGAGGCAG CTGGTTGCCA TTAAAAAGA AGATCATTTG CTTTTCATTC     180
AAGTCTAACA GAAATCCTAC TGTATCTCCT TCTTCCAGC ATGGGTGTAT GTGAGGCTTA      240
CTTCTGGCAT TGTACCAAT CAGCTGCCGG CAGCCATCAT ACGCACAGGA GTATTTCATCA      300
TCCCAATGC CGTAGCCTTC ATGATTGAGG AATTGCTGT CTCGAG      346

```

## (2) INFORMATION FOR SEQ ID NO:1078:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 419 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

```

GAATTCGGCC AAAGAGCCTA GTCCTGTTA CCATTATTAT TATTCATACT CATATTCATT      60
ACTTCTAACT TCAAGTGGGC CATTAGCACT AACTGGCATA CCACACTTCT CTAGTCTATT     120
TATTCTCCTT GATGACTATT TCATACCCCT CCTCTTTCC CCAAACTTCC AACACCTCCT     180
CTTCCCATCA TTCTCAGCTG ACGGCCTTGC TTTCTCCCAT GATTGGGACT AGAGAAGCAA      240
TTTGTAGGGA ATTTCCACAA GTCCTCATC ATGTGGCCAC TCATCTACAT CTGGATCCAT      300

```

CTATTTGGCC TTCCTATTG TTCTTATACA CTCTCCCTGT CTTACTTTAT CTAAGGTCAA 360  
CATCTCCACT CCACCTTATGC ACTAGATCCT GGCATTACAC CAGCAATCCT CACCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1079:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGCTTATTCT TTTTCTTTT TCTTTTTTT TTTTTTTTTC 60  
GAGACAGGGT CTTTCTTTGT CACCACAGGC TGCAGTGCAG TGTGTGATC ATAGCTCACT 120  
GCAGCCCTCA ACTCCAGGCC TCAATGATC CTTCTGACTC AGCCTGCTGA ATGACTGACA 180  
TTACACGTGC ATGCCGCTGT GCCCAGCTAA TTTTAAATT TTTGTAGAG ATGAGGTCTT 240  
GCTTTGTTGC CCAGACTCGA G 261

(2) INFORMATION FOR SEQ ID NO:1080:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GAATTCGGCC TTCATGGCCT ACATTAACAG ATTAATCCAT CTGTATAGGG CTTTGTCTGT 60  
TGGATAGAAT TTAAATTGTC TACATAAATA TTTGTTTAT GACCCCTAGA TTTTATCTGA 120  
ATACACAGAT TAGGCTTTAA AACAGATAT ATATGTCATT TTTGGCTTAA GGAGTTTGCG 180  
TAAGTTAGCT TTTCAACTGG TTCTCGAG 208

(2) INFORMATION FOR SEQ ID NO:1081:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GAATTCGGCC TTCATGACTC CTGATTCAGG GGTCAGTTTA CTTCATAAAA AATCATTAGA 60  
AAAGGAAGAA TTATGCCAAA GACTTAAAGA ACAGTTAGAT GCTCTTGAAA AAGAAACTGC 120  
ATCTAAGCTG TCAGAAATGG ATTCTTTTAA CAATCAACTA AAGGAACTGA GAGAAACCTA 180  
CAACACACAG CAGTTAGCCC TTGAACAGCT TTATAAGATC AAACGTGACA AGTTGAAGGA 240  
AATTGAAAGG AAAAGATTAG AACTAATGCA GAAAAAGAAA CTAGAAGATG AGGCTGCAAG 300  
GAAAGCAAAG CAAGGAAAAG AAAACTTATG GAAAGAAAAT CTTAGAANGG AGGAAGAAGA 360  
AAAACAAAAG CGACTCCAGG AAGCCAAGAC ACCAGNAAAA ATTCCAAGAA GAGGAACGTC 420  
TCGAG 425

## (2) INFORMATION FOR SEQ ID NO:1082:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

```

GAATTCGGCC TTCATGGCCT AAGACTTCTT GCAGGAAAAA TGAGTGCATT GAGGATAGTA      60
ACCTGACTTT CTGACCTGTG ATTAAATTAT GATAGTAGTC AGTCATTTTA CTCTCCCAGG      120
GTTTGAGGAA GTGGCCGGTG AGGACTTGGA GCCTAGTGAG GAGTTAGTAG AGCTGCCCAG      180
GGTGGAGGAG GCCACAGAGG ACAGCCCTGG TGAAGAGAAC AGTGAGGCCT TGGATGTGTT      240
GATATCCAGC AAGGACCTGG CACTGTCTAG TGAGGACGAG GCCTGCACAG GATCTCGAG      299

```

## (2) INFORMATION FOR SEQ ID NO:1083:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

```

GAATTCGGCC TTCATGGCCT AAGTCACTTG TGTAACGTAG TTATACTTTG CTGCATTNTA      60
ATTAACCTTC AACAGCTATT AAAGTGAAT GTAAGTTAAA TTTTGAAGGA AAGGAAATAA      120
ATGTTTTCCA TATTTGCTCT TGATTTACTT TCTGTATGAG AACAGCTGTG TTTTGTATAG      180
GTTTATGGTT TGCATGAGTT CATATTTAAA GTGATCCAGG CCAATGCATG GCTATTGCTG      240
TAAATCTTGA TGTTTATTTC TGCCTTGTA AGTTCTATCA CGGCCTACCT GGAATTTAAA      300
ATTCAGTAGA CAAATTAATT GGTCTCTGCA ACAACTTTT TAATAAGTAG ATTATTTTAC      360
AAAGAAATTT GAACAAATTT AATTGAATCT TTTGTTTAGC TGGCCTCTAA GAACTTTTCT      420
TAATAAAGCT CCAAACACT CGAG                                444

```

## (2) INFORMATION FOR SEQ ID NO:1084:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

```

GAGTGAGACT CCCTCTCAA GGAAAAAAA AAGTTTTCTA GGATCAAAAT AGGAAAACAG      60
TTGTTTCAGA ACTCATGATA TGAGTCATGA CTACAACCCA CCATATTCAG TAAAACCTCA      120
CCTTGTCCTG TTGTCTGACA TTAAGTGTTT TACGAGATCC ATACCTGTGA AATCAGCTCC      180
TCTGGAATGA CAGATGCTGG AATAACTGGC TGGGGCTGAC TGCCCAAAAG CCCAGACCTC      240
CGATCCCGTC CTGTCCGAAT AACTCGAG                                268

```

## (2) INFORMATION FOR SEQ ID NO:1085:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

```
GAATTCGGCC TTCATGGCCT ACTTTAAGTG AACAAACANCA ACAAAAAAGT TAAGGGTAAG      60
ATGAGGCAGC TTTTCAGTGG AAAATACTTG TCTTGGGGAC AGTATGTCAT GTCCCTATAC      120
CTGGTGCCAT TGATAAGGTT ATTCATTCAA CAATATTAC TGATCACTGG CATATGCCAA      180
GCACTCTGCC AAGTACTAGG GATATAAACA TTAGAAAGAC AAGTTCCTCC CTTTTCAGTC      240
ACGATCTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:1086:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 258 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

```
GAATTCGGCC TTCATGGCCT AGAGCTTCAC GGAGGCAAGA GGGTAATGGA GTGCCTAAAA      60
AAAGCTCTAA AAATAGCAAA TCAGTGCATG GACCCCTCTC TACAAGTGCA GCTTTTATA      120
GAAATTCTGA ACAGATATAT CTATTTTAT GAAAAGGAAA ATGATGCGGT AACAAATTCAG      180
GTTTAAACC AGCTTATCCA AAAGATTCGA GAAGACCTCC CGAATCTGA ATCCAGTGAA      240
GAAACAGAGC AACTCGAG                                     258
```

(2) INFORMATION FOR SEQ ID NO:1087:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 391 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

```
GAATTCGGCC TTCATGGCCT AATAAAAAGA ATTATCAAAG AATTGCAGGG GAAACCCCAT      60
AGAGAAGACT CATTCTTAGA TGAGTATACA ATCCATGGGG GTCTTTAGGA TATTTAACTG      120
ATTTGGGAGA GGTTCGGATAA AGAAAAAGGA GCATTAACTT TGAATATGCC TTTAGCTCCA      180
GCCGCCTCTT TAAGAGGAAA TTGTTGGGCA GGTGGGGGAA GGCTAGTCAT GGAACGAAAC      240
TGTAAGCCAG ATCGGGTGTG AGGAGGGGAG GTGATAAAG GATTATAGGG TGGGAGAGCA      300
CAGGCTGAGG AAGAATTGGG ACCTGGCTCA GCCTGGCAAG GCACAGCCTG GGGAGGAGGG      360
GAGAGGTCCT GTAGAAAAGG AGGATCTCGA G                                     391
```

(2) INFORMATION FOR SEQ ID NO:1088:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 368 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGCCTTCNAA | GTTTGAATGG | CCCTTAGGTT | TTAAGTTATC | 60  |
| TATGCAAAGA | TGAANAAGGC | CTTCACATTC | TCAAAGGTGA | CAACTCATAC | CCAGCCATTT | 120 |
| GCTTATTTT  | GCCTGCAGAC | CTCCAATGGA | AGTCCGGGCA | CATGGCGGAG | AGCCTCACCA | 180 |
| ACATGCCACG | GCACTCCCTC | TACATCATCA | TTGGAGCCCT | CTGCGTGGCC | TTCATCCTTA | 240 |
| TGCTGATCAT | CCTGATCGTG | GGGATTGGCC | GCATCAGCCG | CATTGAATAC | CAGGGTTCTT | 300 |
| CCAGGCCAGC | CTATGAGGAG | TTCTACAAC  | GCCGCAGCAT | CGACAGCGAG | TTCAGCAATG | 360 |
| CACTCGAG   |            |            |            |            |            | 368 |

(2) INFORMATION FOR SEQ ID NO:1089:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 409 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTATGGCCTA | GTTCAATTAA | CTAATACTTG | TATTAAATCA | CTTCTAAATG | 60  |
| CTTATTATAC | CCTGTATTAT | AGTATTATAT | TCTGAGTCTT | AAAGGTGCTT | AATGTGAAGA | 120 |
| TTCTCTCTCT | ACATATTCAA | CTCTTACTAA | CTTTTGGCTT | TAGGTAGAAA | TCAGTTAGTG | 180 |
| TATTATATGA | TAAAATAGGA | AACATATTCC | CTAGGGGTAT | AGGTATTTCG | TAGGGAGCTT | 240 |
| TGGAGTCTCA | ATGAGCTTCT | TAAAGAAGCA | TTTTTAATGG | TAGGTTTTCG | GGAGAGTTTT | 300 |
| TGTAGTAAGA | TAAAGTAGAT | GAGAAAGTGT | TGCCTCTAAA | CAATCAACAA | GCTGGGAATG | 360 |
| GGGTGCAGAA | TGAGGAGAAC | CCTAAGCAAT | AGGCAATAAG | AAGCTCGAG  |            | 409 |

(2) INFORMATION FOR SEQ ID NO:1090:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 359 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTGGCCTAGT | GAGAGAGCGT | CAAAAAAACT | TCCATCTCAG | CCAACCACTG | 60  |
| ATACTAGTAC | TGACAAAGAA | AGAACTTCAG | AGGACATGGC | TGATAAGAA  | AAATCTACAG | 120 |
| CTGACTCTGG | AGGTGAAGGA | CTGGAAACAG | CCCCAAAGTC | TGAAGAGTTC | AGCGACCTCC | 180 |
| CCTGTCCAGT | CGAAGAAATT | AAAAATTACA | CAAAAGAGCA | TAATAATTTA | ATTCTGCTAA | 240 |
| ATAAGGATGT | TCAACAGGAA | AGCAGTGAGC | AAAAAATAA  | ATCAACAGAC | AAAGGTGAAA | 300 |
| AGAAGCCAGA | CAGCAATGAG | AAAGGAGAAA | GAAAGAAAGA | AAAGAAGGAA | AAGCTCGAG  | 359 |

(2) INFORMATION FOR SEQ ID NO:1091:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 280 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACATGTTCAT TCTAAGAAAC TTAAGTCCAT TTTTAAGCTT | 60  |
| TAAGATTCCC CCGATCCCAA ATAACCTAAC ACACCAAAG CCTTGCCATT TCACACATGC  | 120 |
| TGTTCCCTTG CTTAGAACCT TTCAATGTC TAGCTCACTC TGTTGGGAC TTCTTTTTC    | 180 |
| TTTCTTTTT TTTGAGACAG GGTCTGGCTC TGTATCCAG GCTGGAGTGC AATGGGGCAA   | 240 |
| TTTCGGCTCA CTGCAACCTC CGCCCTTCCA GGCTCAAGCG                       | 280 |

(2) INFORMATION FOR SEQ ID NO:1092:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 443 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

|   |     |
|---|-----|
| GGAAAATTGA GAAAACCATG AAAGAAAAG AAGAACTGTT AAAGTTAATT GCCGTTCTGG  | 60  |
| AAAAAGAAAC AGCACAACTT CGAGAACAAG TTGGGAGAAT GGAAAGAGAA CTTAACCATG | 120 |
| AGAAAGAAAG ATGTGACCAA CTGCAAGCAG AACAAAAGGG TCTTACTGAA GTAACACAAA | 180 |
| GCTTAAAAT GGAAATGAA GAGTTTAAGA AGAGGTTTCA TGATGCTACA TCCAAAGCCC   | 240 |
| ATCAGCTTGA GGAAGATATT GTGTCAGTAA CACATAAAGC AATTGAAAAA GAAACCGAAT | 300 |
| TAGACAGTTT AAAGGACAAA CTCAAGAAGG CACAACATGA AAGAGAACAA CTTGAATGTC | 360 |
| AGTTGAAGAC AGAGAAGGAT GAAAAGGAAC TTTATAAGGT ACATTTGAAG AATACAGAAA | 420 |
| TAGAAAATAC CAAGCTTCTC GAG   | 443 |

(2) INFORMATION FOR SEQ ID NO:1093:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 256 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACCTCCATTG TATATTAACA TTTATCATAA TTATTATTG  | 60  |
| CTCATTCAAA AAATATTGCT CTGATATGGT ATTGAATATT CCTCATATAG GAAAATATGA | 120 |
| ACAGTTTATT TGCCACCCAG ATGGTTTGGA AGCCTATACC CTCCAAGACA TTGAGAAAAG | 180 |
| AAAAATCTTT CTCTCAGGAG AGAGAATGAG TGCCAAGCAA TGGGAGAAGC CCCTTAAAAA | 240 |
| ACCATCAGAT CTCGAG   | 256 |

(2) INFORMATION FOR SEQ ID NO:1094:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 454 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

```

GAATTCGGCC TTCATGGCCT AAGCTGTTAG TGATTCTGAC ACCCTTGGAC CTCCAGGAGT    60
AGCTCCTCCT GCCACGAGAG GACTCTGGCT TTTCTAATAA GGAAGTTTCT GGCCAATCAG    120
TCCAAGAAAG GCCCGGATTC TCTTCCAAGG TGTGTCTCT GCAGAAATGT TCCTCAGGGT    180
GGAAGGTGCT GCTGCAGCAA GGGATGTCCC CTGAGTTTTC AGGTATGTAG TCTGTGGCTG    240
CAGCAGGTGA ACACTCCTCA CACTCCCAT TCTTACTGTT AGATCTAAGA GAGGAGCAGT    300
CCCTGTGGGT TCCGTGGGAT CCGCATGTAG CACACAGAAT GAGGCACCAC CTCCTTCAT    360
CCTCAAAGCT GTCTCTGCCT TGTTCATACA GACAGATGGG GGCATCACAG TGCTGATAGC    420
GCTGATATAA GTCTGAGAAA GCCCTGGCT CGAG                                454

```

(2) INFORMATION FOR SEQ ID NO:1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

```

GAATTCGGCC TTCATGGCCT AGTGATCTCA TCTCTCCGTC CATGGGCGAA AAAACAGCCA    60
TCACCAGGCC ATTCACGCTT TGTGCTTTTG TTAGCAGAGC CCAGGCAGCC CTGCAGCCCA    120
CATCTAGGGT ACAAACGGAA CGGCGGCGTT TTCCTGTAT CATTAGAGG AAATTTTGA    180
GCTGAACAGT ATTTTTTTC TCCCTCTCTC TCTCTCTGAA ATATTGCTGA GATTAAAGG    240
AGGACGAAGA CAACAGATT ATAGCTGGGT CTTGCTGTT TCCTGACGCT GACCACAGCG    300
GATCTAGTT CTCTGCAGAA GACAGCAAGA TGCCCCAGG AATGTTTGTG AAAAAGGATG    360
ACTGGATGGG AAGCAAGCTG AAGAAAAAGA AGGAAAGAAA GAGAGAAATC AGTAAATCAG    420
CACACAAGAG GTGGAGAAGA GGACTCGAG                                449

```

(2) INFORMATION FOR SEQ ID NO:1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

```

GACTGGCCGC AAGGGACGGG TTGTGAGCAA TGATGATGGA AGCATATCTT ATGAGTCAAG    60
ATCTGAACCT GATGTGCCTG TGGAAATACT AAACATCACA GAAAAACAAC GATTATGGA    120
TGGAGATAAG AATATTGCTA TCATCTCAGA AGCTGCCATG CTCGAG                                166

```

(2) INFORMATION FOR SEQ ID NO:1097:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACATTATTTA | CACCTGTCCC | AGACTTTGAT | TCAGGAACTA | 60  |
| ATGCTGCAAA | GCAAGGACTA | TGATGGAAAA | TGCTCACTGC | AAGAATGGTA | GCTGCAGCAA | 120 |
| GATCAAGATC | CCAGAAAGCA | GTGGCCAAGG | CACTCACTGT | AGACTTTAGT | GCCTGCAGCA | 180 |
| TCTGGTGCAA | GCTACACTGT | CTACGCCCAG | GAACACAGCA | GCAGCATCCG | GCCTGGGCCA | 240 |
| ATTCTGTGTA | AGATTTGATG | CGCTGTCCCT | GGCTGCAGTG | CCTGCAGACA | TCTCTCTCTA | 300 |
| GCCCTTCTAA | CAATTTTACA | GCAACTCAAC | ATCTTTAAAA | ATTTATTAGC | CAACCAAAT  | 360 |
| CAGCTTCTGT | GGCATGCAAG | TAAAAACCCA | GGCTGATATG | TCTGAATACA | GAAGATTAT  | 420 |
| ATTAGTTCCT | TAGAGTCAAT | AATCCATACA | GACTCTATT  | TAGCTTCTTT | GTGAAGTGGG | 480 |
| TAAGAATTCC | TCTGCCTCGA | G          |            |            |            | 501 |

## (2) INFORMATION FOR SEQ ID NO:1098:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

|             |            |            |            |             |            |     |
|-------------|------------|------------|------------|-------------|------------|-----|
| GAATTCGGCC  | TTCATGGCCT | ACTTCAAAAA | CATATATTAA | TATTTTGTGTA | CCACGTAAGT | 60  |
| TCATCAGAAG  | CCTGACTTTA | ATCTCTGATT | TATTATATTT | GAACACTGTG  | AAGAAGCAGT | 120 |
| TTAACTACTGA | ACGAAAGTGT | CGTAATGCAG | CTTTCAAAGT | GGCCATTAAA  | GACAGATCTC | 180 |
| TGCTTTTCTA  | TTAGTACATT | TTCTAAGATG | ACTATCATTG | CCATTGTAGT  | CAGCTTTGTG | 240 |
| TACCTTTATA  | GAGATTCCAG | TATAAACCCA | GAAACGCTCG | AG          |            | 282 |

## (2) INFORMATION FOR SEQ ID NO:1099:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

|            |            |            |              |            |            |     |
|------------|------------|------------|--------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGAAACTTT | TCAAAGAAGT   | AGTCCACGAG | AACTACCTTG | 60  |
| AAAGAGCAAA | ACCAGCCAGG | TGCAGTGGCT | CACGCCCATATA | ATCCCAGCAC | TCTGGGAGGC | 120 |
| CCAGGTGGGT | GGATCTCGTG | AGGTCAGGAG | TTCAAGACCA   | GCTTGGCCAA | CATGGTGAAA | 180 |
| CCCCATCTCT | GCTGAAAATA | CAAAAGTTAG | CTGAAAATAC   | AAAAGTGGCA | CATGCCTGTA | 240 |
| ATGCCAGCTA | CCGGGAAAGG | CTCGAG     |              |            |            | 266 |

## (2) INFORMATION FOR SEQ ID NO:1100:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

```

CTCGAGCGTA TCCCAGAACT TAAAGTATAA TAATAATAAT AATAATAATA ATAATAATAA      60
TAATAAAACC TTCCAACAAG CTTCCTTTCC ACCACAGGAA ATCCTGTTGG GAGTTCCTCC      120
TGAACCAAAA AAAAAAAG ATAGAGTATA AACATACAC TTTTCAGGAA TGCTTATTGG      180
GTAATGTAAG ATAACACCTC AAAATGAAAC TCAGAATTTT ATTTTATTTT ATTTTGTGAG      240
ATGGAGTCTC ACCTAGGCTG GAGTTCAGTG TGTAATCTT GGCTCACTGT AGGCCATGAA      300
GGCCGAATTC                                     310

```

## (2) INFORMATION FOR SEQ ID NO:1101:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTGT ACCTCATTCT GCCATCTCTG ATATTATGTC      60
ATCTGATCAA GAAACTTACT CTTGTAAACC TCATGGACGG ACTCCACTTA CCTCAGCTGA      120
TGAGCATGTA CATTCCAAAC TGGAAGGAAG TAAAGTAACG AAATCTAAGA CTTCTCCGGT      180
GGTATCTGGT TCATCTAGTA AATCAACCAC CCTTCCAAGG CCACGACCTA CCAGGACTTC      240
CCTCTTGCGC AGAGCACGAC TTGGTGAAGC TTCAGACAGT GAACTTGCTG ATGCTGACAA      300
AGCATCTGTT GCTTCTGAAG TATCCACAAC AAGTTCTACA TCAAAACCTC CCACAGGAAG      360
GCTCGAG                                     367

```

## (2) INFORMATION FOR SEQ ID NO:1102:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

```

GAATTCGGCC TTCATGGCCT AAGAAAGCAA GAAAGCACGA AAGCAATCAA GCAAGAAAGC      60
AAGCAGGAAA GAAACAAAAG AAAGAAAGAA NGCGAGAAAA CAAGAAAGCA CGAAAGCAAG      120
CAAGCAAGAA AGCAAGCAAG AAAGAAACAA AAGAAAGAAA GAAAGAAAGN AAACAGGAAA      180
GCAAGAAAGC ACGAAAGCAA GCNAGCAAGC AAGAAAGCAA GCAAGAAAGA AACAAAAGAA      240
AGAAAGAAAG AAAGAAAGAA AAAGAAAACA GGAAAGCAAG AAAGCACGAA AGCAAGCAAG      300
CAAGCAAGAA AGCAAGCATG AAAGAAACGA AAGAAAGAAA GAAAGCAAGA AAACGGGAAA      360
GACTCGAG                                     368

```

## (2) INFORMATION FOR SEQ ID NO:1103:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

```

GAATTCGGCC TTCTGGCCTA GAAACCCGTG ACACACACAC ACACACCTGC ATAGATTTTT      60
CCCAAGCACA CGATATGCAC GTGGATACAC AGACTTACAA GCACAGGGCC ACGTGCAGAC      120
AGACACAGAC CCTGTCTGCA CCACAAACAT ACCACACACA GCCACACACA CAGAAGCCAA      180
ACATCCTCGC ATAGGTGGAT ACAAGCACAG ACTCACATAC ACATATGCCA TACACATATG      240
GATACATACA CAGAGTACCC CCACAAACAC ACAGACACAC ACGGGCAGAG ACAGACAGAG      300
ACAGGCACAG ACCCCCCCCC ACCTCGAG                                         328

```

## (2) INFORMATION FOR SEQ ID NO:1104:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

```

GAAAAAACT GAGTTAATGG CCATGACTAG ATGGGAGGTC AGATTCGCCG TTATATCCTC      60
TCTGTTTTGC AGTTTAGACA CAACTGACCA GCATTGTAA AATGGAGATC ATACGGCTGG      120
TAGAACAGAC TCTTTGTGGC CCAAATTAG CAAATTATA ATAGAATCTA AAGCCATCCC      180
AGGCAAGGGT TAAGTTATGC ACCCTACAC TTAAAGAATA AACTATGTTG GCCGGGCCAA      240
CTCGAG                                         246

```

## (2) INFORMATION FOR SEQ ID NO:1105:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

```

GAATTCGGCC TTCATGGCCT ACGATCAGAA AGAAAACACA GATCTCGAAG TCGGGATCGA      60
AGAAGATCAA AAAGCCGGGA TCGAAAGTCA TATAAGCACA GGAGCAAAAG TCGGGACAGA      120
GAACAAGATA GAAAATCCAA GGAGAAAGAA AAGAGGGGAT CTGATGATAA AAAAAGTAGA      180
GAAAGAAGGC GGAGCAGAAG TAGAGATCGA CGAAGAAGCA GAAGCCATGA TCGATCAGAA      240
AGAAAACACA GATCTCGAAG TCGGGATCGA AGAAGATCAA AAAGCCGGGA AGCTCGAG      298

```

## (2) INFORMATION FOR SEQ ID NO:1106:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 211 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

```

GAATTCGGCC AAAGAGGCCT AGGGATGGAT GGTTCAGCTG CTAGAATTTT GATGCAGGAC      60
TTCTTCAAAA TTGAGTGGAT GATGCCTTGC AGAGCCTGAA AGCCGTCATT CACGGGAAAC      120
ACATGATCCT TACTGTCCGC AATCCGGGCC AGCTGTGTCT CATTGAAATC TTTCACACCA      180
ACACAGTAAA CAATTGCACC AAGATCTCGA G                                         211

```

## (2) INFORMATION FOR SEQ ID NO:1107:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

```
GAATTCGGCC AAAGAGGCCT ACCTGCTTGA ATTGGGGCCC CTTGTGAAGC TGCTGCCGCA      60
TCTCTTCCAT TCGCTGCTTC CGGTACTGCT GCAGAAACTC TTCATCATCT TGGTCCTCAT      120
TCATTATGGC AAAGTCCTTC AGAGTCATCT TCCACTGAT CTTCTCCTGG AGGTCTTTCT      180
GTTTCTGTTG CTCCTCCTCT TCATCCAGAT GGGACCTGCA AGTCATTGAC AGCTTCTTGA      240
TCAGCCTTTC CATCTCCCGG CAACTCGAG                                         269
```

## (2) INFORMATION FOR SEQ ID NO:1108:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

```
GAATTCGGCC AAAGAGGCCT ATGAAAATTG ACTGCAATTA GTAAAGTTGG TATAACGTAC      60
GTTCCCAATT GTGCTATTTA GAATTATGAT AGTATTATGC TCCTACTTTT CTTTGATATT      120
GAGTAGTCTC GAG                                                             133
```

## (2) INFORMATION FOR SEQ ID NO:1109:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

```
GAATTCGGCC AAAGAGGCCT AGCTTTTCT AATCATAAAT TATATGACCT TTACAGAAAA      60
TTTAGAAAAT ACAGAAAAAC TGAAAAGTTA CACATGGTAC AACTCACAAC CACAATCCTC      120
GAG                                                                           123
```

## (2) INFORMATION FOR SEQ ID NO:1110:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGTGTTCAG  | ATCCTACGGC | TTATGAGGAT | TTTCCGAATT | 60  |
| CTAAAGCTTG | CCCGGCACTC | GGTAGGACTT | CGGTCTCTAG | GTGCCACACT | GAGACACAGC | 120 |
| TACCATGAAG | TTGGGCTTCT | GCTTCTCTTC | CTCTCTGTGG | GCATTTCAT  | TTTCTCTGTG | 180 |
| CTTATCTACT | CCGTGGAGAA | AGATGACCAC | ACATCCAGCC | TCACCAGCAT | CCCCCTCGAG | 240 |

## (2) INFORMATION FOR SEQ ID NO:1111:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

|             |            |            |            |            |             |     |
|-------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC  | AAAGAGGCCT | AGGTGGGGAG | GGGAGGGGAC | AGGAGAAATG | AAATACCTTC  | 60  |
| ACCGAGAACT  | CAGCAGCTGC | CACCGCAGCT | GCCTCCTCAG | GATCCGGTCG | TCGGGGGATAG | 120 |
| GGAAAGGGAGG | GGAAAGGGGA | ACGGAAAACA | AAAAAAAGGG | GGAGGGAAGG | GGGAGGGAAGG | 180 |
| AGTCGGGGAC  | GGCCTCAAC  | TCAGCTCAGA | GGAGTCGCTG | CTGCAGCCGC | CACTCGGTAC  | 240 |
| CCGCTGCTAG  | GCCTCTTTC  | CGAG       |            |            |             | 264 |

## (2) INFORMATION FOR SEQ ID NO:1112:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AAATATTAGA | AAATGTATAT | TATAGAACAT | GATATATATT  | 60  |
| TACATTCATC | TCTGTATTCT | CTCAGCTGTT | GTTAGAAGGA | CAGAATGTTA | AACCTTTATCT | 120 |
| TAATTAGTAT | ACTAGAAAGG | GCAGTATAAT | ACTGTTTTAA | AGTGAAGGCA | TGACTGAAAC  | 180 |
| TAAAATATTT | CATAAGGCTT | AGCTAGAGGC | AGAGTAACGT | GTTTTTGTTT | ATTGGGCTTC  | 240 |
| CTTGTAATTA | GTTTTTTCAT | TTAATAATTC | AAACCAACAC | TTTTAAAAAA | ATAATTCAGA  | 300 |
| TGAGACTGAG | CCATATCTGC | AGTAAGAGAA | ATATTTCTTA | ATGTTTTGGT | TACTTATGAT  | 360 |
| AGAGTACTTT | TCTTGATACT | GTTAACTTTG | TGCTTTTTTA | AAAAAGTGAT | TCTCTAACAG  | 420 |
| ACCTCTTAAA | TTGTGACATG | AAGGTATGTA | ATTAGATTTC | AGAAATTGGT | TTATTAGTGA  | 480 |
| GGAATTTTAA | TCAATAAATG | TCATGGGGCG | GCGCTCGAG  |            |             | 519 |

## (2) INFORMATION FOR SEQ ID NO:1113:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

```

GGCCACCTA GTTGGTATCC CAAATTCACA CATTCAAAG CAAAGCCATT TCTCACCTTC      60
CTCCAAATA CTTGTAATTC CTAATATCCT GACTCCAATC CATTCTTTAT TTTCTATTCC      120
CAAGGCCCTT CACAGAATCG AAACCTTTGT TATGAGCTCT TACATGGTGT ATCATCAATA      180
TGTTCACTAG ACAGGAGTTT TTTTAAAAA AAATCCTCAT CATTCCCTTT CAATCAAGA      240
GCTCTGATGG CTTCCAGTCT ATACAAGATA TATTAAGGCT CAACTTACAG TTCCAGTCTC      300
ACCTGCCCCA CCTCCACCTT CCCAAACCCT CTGTATTCTA GCCAGAGCAT ACCTGCATTTC      360
CCTTAGCTCA ACATGTGTCC TTGCTCACAC TGTCCCTTTG GTTGACCTAG CTTCAATTCC      420
TTCTCATGT GCAGTTATGT GTCTACTAAG CAGCAATGTG AAATGTCTTT ATTGTAGGTC      480
TGTCAAAAGC TAAAGTCATG GCCCGGTGCA GTGGCTTGGG CCTGTAATCC CAGCACTTTG      540
GTAGGCCTCT TTGGCCGAAT TC                                          562

```

## (2) INFORMATION FOR SEQ ID NO:1114:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

```

GAATTCGGCC AAAGAGGCCT ATTATTGCTA TCGCCCTCCT TTCCCTTATT GCCTCCAGG      60
CAAGCAGCTG GTCAGTCTTT GCTCAGTGTC CAGCTTCCAA AGCCTAGACA ACCTTTCTGT      120
AGCCTAAAAC GAATGGTCTT TGCTCCAGAT AACTCTCTTT CCTTGAGCTG TTGTGAGCTT      180
TGAAGTAGGT GGCTTGAGCT AGAGATAAAA CAGAATCTTC TGGGTAGTCC CCTGTTGATT      240
ATCTTCAGCC CAGGCTTTTG CTAGATGGAA TGGAAAAGCA ACTTCATTG ACACAAAGCT      300
TCTAAGCAG GTAAATTGTC GGGGGAGAGA GTTAGCATGT ATGAATGTAA GGATGAGGGA      360
AGCGAAGCAA GAGGAACCTC TCGCCATGAT CAGACATACA GCTGCCTACC TAATGAGGAC      420
TTCAAGCCCC CTCAG                                          435

```

## (2) INFORMATION FOR SEQ ID NO:1115:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

```

GAATTCGGCC AAAGAGGCCT AGTGCCTAGA TTGATCGGTA TAAGGCTCAC TCTCCCGCCC      60
CCCAAAGTGG TTGATCGTTG GAACGAGAAA AGGGCCATGT TCGGAGTGTA TGACAACATC      120
GGGATCCTGG GAAACTTTGA AAAGCACCCC AAAGAACTGA TCAGGGGGCC CATATGGCTT      180
CGAGGTTGGA AAGGGAATGA ATTGCAACGT TGTATCCGAA AGAGGAAAAT GGTGGAAGT      240
AGAATGTTCC CTGATGACCT GCACAACCTT AATAAACGCA TCCGCTATCT CTACAAACAC      300
TTTAACCGAC ATGGGAAGTT TCGATAGAAG AGAAAGCTGA GAACTTCGGA AAAGGCTCAT      360
CTGTCACCCT GGAGAAGGGA AACTGTACTT TTCCCTGTGA GGAAACGGCT TTGTATTTTC      420
TCTGTAATAA AATGGGGCTT CTTTGAATT TGATAAGCCT AGGCCTCTTT GGCCGAA      477

```

## (2) INFORMATION FOR SEQ ID NO:1116:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

```

GAATTCGGCC AAAGAGGCCT AAGATGAAGC CCAACATCAT CTTGTACTT TCCCTGCTCC      60
TCATCTTGGA GAAGCAAGCA GCTGTGATGG GACAAAAAGG TGGATCAAAA GGCCGATTAC      120
CAAGTGAATT TTCCCAATTT CCACACGGAC AAAAGGGCCA GCACTATTCT GGACAAAAAG      180
GCAAGCAACA AACTGAATCC AAAGGCAGTT TTTCTATTCA ATACACATAT CATGTAGATG      240
CCAATGATCA TGACCACTCC CGAAAAAGTC AGCAATATGA TTTGAATGCC CTACATAAGA      300
CGACAAAATC ACAACGACAT CTAGGTGGAA GTCAACAAC TCTCCATAAT AAACAAGAAG      360
GCAGAGACCA TGATAATCA AAAGGTCATT TTCACAGGGT AGTTATACAC CATAAAGGAG      420
GCAAAGCTCA TCGTGGGACA CAAAATCCTT CTCAAGATCA GGGGAATAGC CCATCTGGAA      480
AGGGAATATC CAGTCAATAT TCAAACACAG AAGAAAGGCT GTGGGTTTAT GGAATAAGTA      540
AAGAACAAC TTCCGTCTCT GGTGCACAAA AAGGTAGAAA ACAAGGCGGA TCCCAAAGCA      600
GTTATGTTCT CCAAACTGAA                                     620

```

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

```

GAATTCGGCC AAAGAGGCCT AGACCTGCCA CATTGTGTTA CATTTTTCCA TTTCTAAACC      60
ATCCTTAAAG AAAATCATAT ATGGGGTCAC ACCATCCTCA CGGTAGTCCA ATAGAGCAAC      120
CATGCCATCT GGATTCATGT TTTCAACAAA CCCTCGAG                                     158

```

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

```

GCACTGCTTC TGTAAAGTC ACTGACCTTA ACAGTTTAGA ACTAGATAAA GGAAATTTTG      60
TGTTTGACCA AATGTGTGAA ATAGGTAAGC CAGAACCATT GAATGAGGAG GAAGCAAGGG      120
GTGTGGTTGA GAATTATAAT GATGAAGAAG TGTCATTAG AGTTGGTGGA AATACACAGC      180
CAAGTAAAGT TTTGAACAAA AAAAATGTAG AAGCTATTGG ACTTCTTGGA GGACAAAAGA      240
GCAAAGCAGA TTATGAGCTA TACAACAAAG CCTCTAATCC TGATAAGGTT GCTAGTACAG      300
CGTTTGCTGA AAATAGAAAT TCTGAGACTA GTGATACTAC TGGGACCCAT GAATCTGATA      360
GAAACAAGGA ATCCAGTGAC CAAACAGGCA TTAATATTAG TGGACTCGAG                                     410

```

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

```

GAATTCGGCC TTCATGGCCT AGTTGCCCTA ATTGCGAGCC GAACTTGGAA GCCACTGTAT      60
CCAATGGACC TTTTCTGCAG CTTTCTTCCC AGTCTCTTAG CCATAATGTT TTTATGTCCA      120
CCAGTCCTGC ACTTCATGGG TTATCATGTA CAGCAGCAAC TCCGAAGATA GCAAAATTGA      180
ATAGAAAACG ATCCAGATCA GAGAGTGACA GTGAGAAAGT TCAGCCACTT CCAATTTCTA      240
CCATTATCCG AGGCCCAACA CTGGGGGCAT CTGCTCCTGT GACAGTGAAG CGGGAGAGCA      300
AAATTTCTCT TCAACCTATA GCAACTGTTT CCAATGGAGG CACAACACCT AAAATCAGCA      360
AAACTGTACT TTTATCTACT AAAAGCATGA AAAAGAGTCA TGAACATGGA TCCAAGAAAT      420
CTCACTCTAA AACCAAGCCA GGTATCTCG AG                                         452

```

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

```

GAATTCGGCC TTCATGGCCT ACATGAATCT ACTTCTGATC CTTACCTTTG TTGCGCTGC      60
TGTGCTGCC CCCTTTGATG ATGATGACAA GATCGTTGGG GGCTACATCT GTGAGGAGAA      120
TTCTGTCCCC TACCAGGTGT CTTGAATTC TGGCTACCAAC TTCTGCGGTG GCTCCCTCAT      180
CAGCGAACAG TGGGTGGTGT CAGCAGGTCA CTGCTACAAG TCCGCGATCC AGGTGAGACT      240
GGGAGAGCAC AACATCGAAG TCCTGGAGGG GAATGAACAG TTCATCAATG CAGCCAAGAT      300
CATCCGCCAC CCCAAATACA ACAGCCGGAC TCTGGACAAT GACATCCTGC TGATCAAGCT      360
CTCCTCACCT GCCGTATCA ATTCCCGCGT GTCCGCGCATC TCTCTGCCCA CTGCCCTCC      420
AGCTGCTGGC ACCGAGTCCC TCATCTCCGG CTGGGGCAAC ACTCTGAGTT CTGGTGCCGA      480
CTACCCAGAC GAGCTGCAGT GCCTGGATGC TCCTGTGCTG AGCCAGGCTG AGTGTGAAGC      540
CTCCTACCCT GGAAAGATTA CCAACAACAT GTTCTGTGTG GGCTTCCTCG AG                                         592

```

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

```

GAATTCGGCT TCATGGCCTA AATAATTTT ATTGAGAATA ATAAATCACT CTTTATCATA      60
GTATCTTCTC TTCCCTCTTC CCCTTAGTTT TGGATAGCCT AACTCTGAGA AGTTAACCCT      120
TAAACAGTTT TCTGGAAGAG ACTGAATTTT TGGGTCCTTG CAGCTGTGAT GGTTCAGAG      180
CTCAGACTGA TCAGGCATCA AGCTACCCTC AAGAGTTTCT GGGCTGGATG TTTGAGAACA      240
ACATCTACAC CAGTAAAGTG TAATAGGTCA GTTTCAAAAC GACCAAAAGA CCCCACTACT      300
CGAG                                         304

```

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGTGAACTC  | CATTTTTTTA | CTGCTATTAC | TCTGTGTTTT | 60  |
| CAGTTTTATG | ATTTGGAATA | CCATGATGGG | AACATCTATA | CTAAGCATTG | CTTGGGGCAT | 120 |
| AAACAGGCT  | GGATTACTA  | CTGGAATGTG | TGTCATCATA | CTGATGGGCC | TTTAACTACT | 180 |
| TTATTGCTGC | TACAGAGTAG | TGAAATCAGC | GACTATGATG | TTTTCGTTGG | ATACCACTAG | 240 |
| CTGGGAATAT | CCAGATGTCT | GCAGACATTA | TTTCGGCTCC | TTTGGGCACT | GGTCGAGTCT | 300 |
| CCTTTCTCC  | TTGGTGTCTC | TCATTGGAGC | AATGATAGTT | TATTGGGTGC | TTATGTCAAA | 360 |
| TTTCTTTTT  | AATACTGGTA | ACCTCGAG   |            |            |            | 388 |

(2) INFORMATION FOR SEQ ID NO:1123:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 478 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| AGCAATTCCA | TAAACACATC | CTGGTGTCTC | CACAGCCAAG | GTTTTTAGGT | TGCTATACCA | 60  |
| ATGGCTTATT | AAATGAAAAA | GGCACTAAAA | GTTTCTTGAG | ATTCTTTATA | CTCTCTGCCT | 120 |
| TCAGCAATCA | ATTCCATTCA | TACATCAGCA | CTCTGCTGGT | TCTGTTTGAA | ATATGTTCTG | 180 |
| TATTTAAAC  | TCAAATCTTG | TTGGATCTCT | GCAGGGCTTG | TGACCAATGA | AGTCATATTT | 240 |
| TTTATGTTT  | GACAAAGCTT | GCTTCACTCC | ATCAGAGAAT | GACTATCAAT | TTTTTTTAA  | 300 |
| CTGCTCTATC | ACGTCCTCTC | CTGTCACCCA | TTTTGAAGAG | TGGCAGAACT | TGAAGTTCAA | 360 |
| CTTCTCTGT  | AAATATCCAA | GTATAAGGCC | CAGGAACCTC | TAGAATAACC | CAGATGCGCT | 420 |
| TTAATTTTTT | TTAATATGTT | TTGATCACAG | AACTCCTTAG | GCCTCTTTGG | CCGAATTC   | 478 |

(2) INFORMATION FOR SEQ ID NO:1124:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

|            |            |            |             |            |            |     |
|------------|------------|------------|-------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGGAATTCAG | TGCAAACTACT | ACTTTGAACT | GTGGTTCCTA | 60  |
| ATTTCACGA  | AAGTTTTTCT | CTGTTCTTCT | ATTATGGCAC  | TTTTCAGGGT | CTCCCTTGTA | 120 |
| CATTTTAGTT | TTTGTGTTTT | TCAGTAAGTG | CCTTGAGATC  | AGGGACCGGT | TCTACTGGTC | 180 |
| TGTTCCAACC | ATAGTTCCTT | AAACATTGTG | TTCCATTAAT  | ATTGGGTGAA | TTGAAATGAA | 240 |
| TTTATAGGAA | GCTCCTTAAC | CTGGGGTCCT | CAGACCTCTA  | TGGGGTCCAT | GGACAGAATT | 300 |
| TGAAGTGGGA | AGGATATATG | AACTTGGATG | GAGGAAAATT  | ACTTATTTGT | TTTTTACCAA | 360 |
| CCTCTCCTTT | GTAATTAGC  | CATTGTTCAT | ATTATAATGT  | AGGCAATAAA | AAATAAAAAA | 420 |
| AAAAATAAAA | TAAAGGCAGC | TTAGGCCTCT |             |            |            | 450 |

(2) INFORMATION FOR SEQ ID NO:1125:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 550 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

```

GAATTCGGCC AAAGAGGCCT ATCCTTAGTG GATTCCGACT TCCATGGCCA CCGTCCTGCT      60
GTCTATATCA ACCAACACCT TTTCTGGGGT CTGATGAGCG TCGGCATCGG GCGCCTTAAC      120
CCGGCGTTTC GTTCATCCCG CAGCGCCAGT TCTGCTTACC AAAAGTGGCC CACTAGGCAC      180
TCGCATTCCA CGCCCGGCTC CACGCCAGCG AGCCGGGCTT CTTACCCATT TAAAGTTTGA      240
GAATAGGTTG AGATCGTTTC GGGCCCAAGA CCTCTAATCA TTCGCTTTAC CGGATAAAAC      300
TGCGTGCGCG GGGTGCGTCG GGTCTGCGAG AGCGCCAGCT ATCCTGAGGG AAACCTCGGA      360
GGGAACCCAGC TACTAGATGG TTCGATTAGT CTTTCGCCCC TATACCCAGG TCGGACGACC      420
GATTTCACAG TCAGGACCGC TACGGACCTC CACCAGAGTT TCCTCTGGCT TCGCCCTGCC      480
CAGGCATAGT TCACCATCTT TCGGGTCCTA ACACGTGCGC TCGTGCTCCA CCTCCCCGGC      540
GCGGCGGGCG

```

## (2) INFORMATION FOR SEQ ID NO:1126:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```

GAATTCGGCC AAAGAGGCCT AGTTTGCAAG AAGAAGGCAT GGGATAGTCT GAGAACAAC      60
AGGCACTAAA TGGAGCAACA TCATCTTGAG GTGTCAAGCA GGAGCTGGGA GACCAGCAGA      120
GACTCCCAAG GCCTTGCTGC TGTGCTCTG CAGGCAGCTC TGTAGGCAG GCTGTTGTCA      180
TTTTGCAAGT GAGCAAGCAG AAGCCCAGGC AGGTGAGTCA TTCACTCCAC AGTTCATAAC      240
TTGGATTGTG GGTAGTTTAC ACCTGACTCC AAAACTTGAC TTTTACTTAC TCAGCTATAC      300
TGGCCTCTCA AGAAAGGCTA GGCCTAATT TCTAGACTCT CTTTTACCAA TAATACCTGT      360
TGCCACGAAG TAGGCCTCTT T

```

## (2) INFORMATION FOR SEQ ID NO:1127:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```

GAATTCGGCC AAAGAGGCCT ACTCTCAAGG TGGGCATATG CAAAACATAA TCTCTAAATT      60
CTTCAATACT AAGAAATACC TTTGTTTTAC CCCTAAAATC AAATGCCATT TTGGCTGGAT      120
ATAGGATTCT AGGATTAAAG CCTTTTTCCA GCAGAACTTT GAAGACATTG CTCCTTTTAC      180
TTCTAGCATC CAGTGTGTCC AGTGATAAGT CTGCTGTCAA CCTGATTCTT GTTCCTTGGT      240
AGGTAATTTT TCTTCTCTCT CTAGAAGCCC TTATTATTTT CTCTTTATCA CTAGAATTCC      300
AAAAATTTCAC CAAGATGTGT CTAGGAGTCA GTCTCTTTTC ATCAATTTTA CTAGGTACTC      360

```

G

361

## (2) INFORMATION FOR SEQ ID NO:1128:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```
GCAGCCAATG GCGGCGCCAG AGGGGAAACN GAGCCTTGCT NACGGGCCCA ACGCTGGGGA      60
GCAGCCAGGC CAGGTGGCGG GCGCAGACTT CGAGAGCGAG GACGAGGGCG AGGAATTGTA      120
TGACTGGGAG GACGACTACG ACTATCCCGA AGAGGAGCAG CTCAGTGGTG CCGGCTACAG      180
AGTATCAGCC GCTCTTGAAG AAGCCGACAA GATGTTTCTG AGAACAAGAG AACCAGCCCT      240
GGATGGCGGG TTTCAGATGC ATTATGAGAA GACCCCGTTT GATCAGTTAG CTTTATCGA      300
AGAGCTTTT TCCTGATGG TTGTCAATCG TCTGACCGAA GAACCCGGCT GCTCTCGAG      359
```

## (2) INFORMATION FOR SEQ ID NO:1129:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

```
GATGGCACCC TCCTCAGAAA GCAGCGTCCC CTCTCACAGT ATGTCCTCCC GACGGGACAC      60
AGACTCGGAT ACCCAGGATG CCAATGACTC AAGCTGTAAG TCATCTGAGA GGAGCCTCCC      120
GGACTGTACC CCTCACCCCA ACTCCATCAG CATCGATGCC GGTCCCCGGC AGGCCCCCAA      180
GATTGCCAG ATCAAGCGCA ACCTCTCCTA TGGAGACAAC AGCGACCTG CCTAGAGGC      240
GTCTCGCTG CCCCACCCG ACCCCTGGCT CGAG      274
```

## (2) INFORMATION FOR SEQ ID NO:1130:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

```
GGCTTTCCAC CTTCCCTGCG GAGATGAGGG TGGTGGCCTC CCTTTTGTG ACCCTTCCAA      60
GGGTGATGCT CGTCTGCTGG CTTTCTCCA AGATGCTGCC AAAAATGATC TTAATAGAC      120
ACAAGCCTGG TTGTGATATT TTCTGATTC AAGTGCTCT GTGGTTCTTG GTTGCCCTCA      180
GGAGAGAGTT CAAGCCTCTT ATGGTGGTT GTGAGGCCAG GCCTGAAC TA GCCCCATCGT      240
CTGTTTCAATC ACCACCCAG TATCCCTGCT GCAGGTTTT AAAGATCTCA TGTCCCTGAT      300
TGCCCTGTCAC TGTGCTGAC TCGAG      325
```

## (2) INFORMATION FOR SEQ ID NO:1131:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 639 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

```
CTCGAGGATC CCCGGGGACG GGACGGGCCG GGGCTTGGAG GGGGGTCGGC TGCCACAGGC      60
TCACATCACG GCCTCCATAT GCAGGATCCT CAGGGCCCTCG GAGATCTCGG CGTGGGGGTC      120
CATCTGGCCG TACATGCCCA CCAGGAAGGC CCGGTGGAGC AGCACAGCCG CGTGCTCTTG      180
GCACAGGAGA GCGTACTCAG GCAGGTTCCG GAGGGCCGTC TGCACCACCT CAAAGTCCTG      240
GCTGCCCAGG CAGTACATGA ACGTNGGGCA GGAAGCGGC TGCAATGCNG GGGGCTGTCT      300
GCATGGAGCG CAGGGCCAGG CTGAAGGCGA GGTTCGGCA AACTCTCTCG GCCGAGCTCA      360
TCAGCCGCTG CAGGTGGTC GAGAAGAAGC TCAGGATCTC GGGTCTCCGC CGGGACATCT      420
CGTCTATGTC ACTCAGAACC TCCAGCAGAT CCTCCACCGT TTGGCCCCGG GAAAGCGGTT      480
TCATGTAGGG GGCCATCTCG GCCGCGGTCA GAGGGGTGAA CAGGAGAGCG CTGACCAGGG      540
GCAAGGAGCC GGCTGAGCTC TCCTCCTCGC CCTCTTCGTC CAGGCCTCGG TCGGTCTCTGT      600
CGTCCCTGCT GGGCAGGCTG AGCCCTGCAA GGAGGGATC      639
```

(2) INFORMATION FOR SEQ ID NO:1132:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 448 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

```
GGTCTGTGGT CTGGAGGGCT TAAATTGTAA AATACATCCC TTATGGAATC CTAAATTCCT      60
CTAGGTGTTT TTGGAAGGCG CATTTGAGCC TTGTGAGCTA AAATGGAATG GATTTAATAT      120
TTCCTATCTG GCATTTCAT CTGGCCCTG GTACACAGT CACTGGCCTG GAACTCAGCC      180
TTGATTCACT GTCCGTCTTC ACGGATTAGC TGTGCTGTTA TGTGTCTGT GCTGCAGATT      240
GGCCCATGTG GGAAGTCGGG GGGGACCTGA TTTCCTGCTT GGAAGACTTG GGGGACTGCC      300
GAGCATATCA AAGTGTTTAT AGTCACCAAG TGAAGTGCAG CACAACCATC TCCTCTCCAG      360
CAAGCCCTGA AGTCAGTAGT GCCTGCAGGT GAAACCAACC AGCCCTGTGT TAGAGGAGGA      420
AAAGCGGAGA TGACGTGGAA GTCTCGAG      448
```

(2) INFORMATION FOR SEQ ID NO:1133:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 372 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

```
GAATTCGGCC TTCATGGCCT AGGCTATGG CCGGAGCTTG AGATACGCCG CTCTGAATCT      60
TGCCGCCCTG CACTGCCGCT TCGGTCACCTA TCAACAGGCA GAGCTCGCCC TGCAGGAGGC      120
AATTAGGATT GCCCAGGAGT CCAACGATCA CGTGTGTCTC CAGCACTGTT TGAGCTGGCT      180
TTATGTGCTG GGGCAGAAGA GATCCGATAG CTATGTTCTG CTGGAGCATT CTGTGAAGAA      240
```

GGCAGTACAT TTTGGGTTAC CGAGAGCTTT TGCTGGGAAG ACGGCAAACA AGCTGATGGA 300  
 TGCCCTAAAG GACTCCGACC TCCTGCACTG GAAACACAGC CTGTGAGAGC TCATCGATAT 360  
 CAACATCTCG AG 372

## (2) INFORMATION FOR SEQ ID NO:1134:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 452 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

GAATTCGGCC TTCATGGCCT AGCTGGTTCT TTTATTTTGG TGTCTCAGGG ATGTAAAAGA 60  
 TTTTATAGTC ATAATATTAA ATGGCAAAAT CAAATTTCCC AACAATATAC AAAATAAAAT 120  
 CCCATTTACA AAGGGAAAAG GCTTTATCTA TTTGTATATC TTCTTATATG TATATAAAAT 180  
 CATAGAAAAC TATCTGGAAG TGTATGTAGC AAAGCATTA CAATGGTTAT CTCTGGGTAT 240  
 AAGAAGGAAC TAGAACTGAA GAAGATGGTG GTGATAAGGG AAGGTATACC TTTCTTTTTT 300  
 TTTTATTCTG CTGTGCTTGA GTTTTAAAGA ATGAGAATAT TCATGTATTC CTGTGATAAT 360  
 TATAACACAG AAAACCTCCT TATTAGGAAT AGGAGGCTGA TTTCTTTTTT AATGACTGAT 420  
 CTTAGGTCCT TTTTGGGTAT TTCTCCCTCG AG 452

## (2) INFORMATION FOR SEQ ID NO:1135:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 283 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

GAATTCGGCC TTCATGGCCT AGGAGGAGGG AAGGATTGGG AGCAGTGGGG TGTGAGTGGG 60  
 AGAGGAGGTA GGAACCCAGA TGGGGAGAAT CGAGCCAAGT TCTGGGTTGG AGGAAACTTT 120  
 CTTATTTAAC TGAGCTGGTG GGTACATAT CTAATGTTGC AGGTGATGAA TACAGGCTGG 180  
 GGTAGCCGTC TAAATCCACC GAAAGAAGTA AATGAAAGTG GTTCTTTGTA GGTGCAAGG 240  
 TCAAGGTAAA TGGCTGGTTT TTAGGAAACA ACTGATCCTC GAG 283

## (2) INFORMATION FOR SEQ ID NO:1136:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 264 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

GAATTCGGCC TTCATGGCCT ACTGGAGACT TGTAATTAGT CTAAGCATAA TATGATTAGG 60  
 TGGATGAAAT ATTTTGGAGT TTGGTTTGT TTTAAATGTA AATACTCATG AAAAGTAAAA 120  
 CATACTGCAC TGTGTCCCTG GGAATATTTT TGTTATCTTT AAAATACTCA GTATTATAGG 180  
 CATTATTAA CACAGCCTTA CATTGCCCCG GTTTGACCTG GAGGCCGAAA TGAATTGTGA 240

CTTATGTCCC AGCTGGGTCT CGAG

264

## (2) INFORMATION FOR SEQ ID NO:1137:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 653 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

```
GAATTCGGCC TTCATGGCCT ACCACGTTTC CTCACCTGTA AAATGGACAC TGCAGCTATG      60
TCTGCTGTTC CACATTGTTG ATAGAACTGG ATGCTGTGGT GACATTGGG ACACATATCAT      120
GGTGCCCTGGG GTGGGTGGGT GCCCAGGCCT GTGGGCTTCT GTCTTTCATC AAAGAACTTC      180
AGATCCCAGA AAATTAAGAT TCTCAAAACA TAACTGTCGG AAAGGGCTTT TGAATCCACC      240
TTGGTGGCCT CTTCTGCCT CCAGGGCTCA TGAGATAGGC TGAATTCATA TGAAAGTTTT      300
GAGGATGAGG AAGTCTCTCT CCTCTTCAGA TACTGACCCT CTCTCTCCTT ATTTCTTGG      360
TGCCCAAGAT AGGGCTTTGG TTATCTTGAA TGAATGAATA TAAACTCACA GGTGTGATCT      420
GAGCCACCTA AAGCCCTCTT TGGGTCTGTC TCAGCTTGAG GGCATCACCT AAAGGCCACT      480
GGCTGCATTT TCCAGGAGGT GTTTTCTAAG CTGTATCTAT ATAGGAATGG GGAGGAAAGC      540
TAAGTCATTG TAGACTGAGA GAAAGGGAAT AAGAGTCTGT TCCAGACCAG CTAGGGCTGA      600
CAAGCTTAGG CAGCTGGGGG CAGAGGGCAC TGAGAATGAG GCCCTAGCTC GAG          653
```

## (2) INFORMATION FOR SEQ ID NO:1138:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

```
GAATTCGGCC TTCATGGCCT ACAAAGGTT CTTGATGACC ACCACAATCC TCGCTTAATC      60
AAAGATCTTC TGCAAGACCT AAGCTCTACC CTCTGCATTC TTATTAGAGG AGTAGGGAAG      120
TCTGTATTAG TGGGAAACAT CAATATTTGG ATTTGCCGAT TAGAACTAT TCTCGCCTGG      180
CAACAACAGC TACAGGATCT TCAGATGACT AAGCAAGTGA ACAATGGCCT CACCTCAGT      240
GACCTTCCTC TGCACATGCT GAACAACATC CTATACCGGT TCTCAGACGG ATGGGACATC      300
ATCACCATTG TCGAG          315
```

## (2) INFORMATION FOR SEQ ID NO:1139:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

```
GAATTCGGCC AAAGAGGCCT AGTTAATACT TATTTATTT TCTGTTTTA TCATCTAGTC      60
AACTCGCAAA CTTCCAGCAT TTGTCTAAAT CTAATCAATA TATTCCAGTA CATCAGATAA      120
```

TATATCAGTT TCATCCTCCT GAAAACTCT TTTCCAGTGT ATCCTGACCT GCTCTAATTT 180  
 TGACTTGATG CTTTCTGTAT CTGGTGCACA GCTGTTACCT TGGAACTTC CCTTCATCAT 240  
 TATTCAGAGT GTTCTGTAG TTTTCTCTT GCATTGGATT TTGTGCTTCC TGAATCCTCT 300  
 CGAG 304

## (2) INFORMATION FOR SEQ ID NO:1140:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

GAATTCGGCC AAAGAGGCCT AGGGTTTTGT TTGGTTTGGT TTTAGTTTTT TGTGGGAGAA 60  
 TTAAGATTTT TTAAGAGATA TTTTCAGATT TTTCTGTGT CAGTTTGGT AATTGTGTGC 120  
 TTTTAGGAAA ATTTCAATTC ATCCAAGTTG TTGGATTAT TGGCATAAAA TTTTTCAGAA 180  
 TATTCCTTTA ATATCCTTCT AATGTCTGTA GAATCTAATC TGTATTGCAG TCTCTCATA 240  
 TTGGTAATTT GTGTTTTTTC TATTTTTTCC TGGATCAGTC AGTCTAGCTG GGGAGAACTC 300  
 GAG 303

## (2) INFORMATION FOR SEQ ID NO:1141:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

GAATTCGGCC AAAGAGGCCT AGTAGCTTAG TTATTGTTTA CTTTGAAGCC CTTTGCCTC 60  
 TACTCTCTCC CATATATCTT CTCCTGACAG GGTGAAGTCA CCTATAGCAT TTCCTAGTGT 120  
 ATGGAAGTAT TAATTTCTTT CTTTACTGGA AGAGCTACTA GCTTTTCTTC ATACAGTTTC 180  
 CTCTGCTCCA GTTTCATAAG TTTCTTTTGG GCTTGTATCT GTTAGGATC AGGTGATATG 240  
 GCTTCATTTT TCATGACTGA AGCCCGGCAA CATAACACTG AAATTCGAAT GGCAGTCAGC 300  
 AAAGTGGCTG ATAAACGGA TCATCTCGAG 330

## (2) INFORMATION FOR SEQ ID NO:1142:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

GAATTCGGCC AAAGAGGCCT AGAGGGGAGC CTGGCCTCTG GCATATTCAT CAAGTATGAG 60  
 TTCTGGGGAT GAGTCACTGT AATGATGTGA GCAGGGAGCC TTCCTCCCTG GGCCACCTGC 120  
 AGAGAGCTTT CCCACCAACT TTGTACCTTG ATTGCCTTAC AAAGTTATTT GTTTACAAAC 180  
 AGCGACCATA TAAAAGCCTC CTGCCCCAAA GCTTGTGGGC ACATGGGCAC ATACAGACTC 240

ACATACAGAC ACACACATAT ATGTACAGAC ATGTACTCTC ACACTCCAGT CGAG

294

## (2) INFORMATION FOR SEQ ID NO:1143:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

```

GAATTCGGCC AAAGAGGCCT AGTTTGTAGT CAGAATAACA TTAATTTTGA GAGATTGAGG      60
TAAAGAACCT TAACTAATGC TAAGGAGTTT ATTTTGATTA ACATAGGTTA TTCTGACCAC      120
CACCTCTTCC TTCCTTAATC TCCTTAGAAT CTGACAGTCT CAAAGCTGTC ACACAAATTA      180
GACTAATTTT GACACTTTGA AATGAAAAC TCAAGGAAGA AGTAGCCACG GACAGTTATG      240
TTTATAATCA GTAGGTGGCA CTCTTTCCTC AGGTAGCCCC CCATTTTCAC ATGATGTGTT      300
TGAAGGTAA  ATGCCACCA  AAGTGCTCGA  G                                     331

```

## (2) INFORMATION FOR SEQ ID NO:1144:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

```

GAATTCGGCC AAAGAGGCCT ACTTCAGCAT GACTACTCAG TTGCCAGCTT ACGTGGCAAT      60
TTTGCTTTTC TATGTCTCAA GAGCCAGCTG CCAGGACACT TTCACTGCAG CTGTTTATGA      120
GCATGCAGCG ATATTGCCCA ATGCCACCCT AACACCACTG TCTCGTGAGG AGGCTTTGGC      180
ATTAATGAAT CGGAATCTGG ACATTTTGGA AGGAGCGATC ACATCAGCAG CAGATCAGGG      240
TGCGCATATT ATTGTGACTC CAGAAGATGC TATTATGGC TGGAACTTCA ACAGGGACTC      300
TCTCTACCCA TATTGGGAGG ACATCCCAGA CCCTGAAGTA AACTGGATCC CCTGTAATAA      360
TCGTAACAGA TTTGGCCAGA CCCAGTACA AGAAAGACTC AGCTGCCTGG CCAAGAACAA      420
CTCTATCTAT GTTGTGGCAA ATATTGGGGA CAAGAAGCCA TGCGATACCA GTGATCCTCA      480
GTGTCCCCCT GATGGCCGTT CGCTCGAG                                     508

```

## (2) INFORMATION FOR SEQ ID NO:1145:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

```

GAATTCGGCC AAAGAGGCCT AAATTGCTGG CGGATTTAGA CCGGTAGAAA ACCCGGGATG      60
GTTTATTTTG ATTGAGCCCC CTCTGGGTGG CAGAGAGGAG GCTTGGGCTC TGGGCCCTTT      120
ACGTTTGGAG AAATGGCTTT ATCAGCTCAG TTGAAAGGTT TTTCCCTCTA GCTAGTGAAA      180
GATAAACTTG GAAATGCAGG TTTCTCCAGC GGTGCGTGGT GGGGACAGGG GTCGCCTAGG      240

```

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAACTTGAG  | GGGCCGCGGC | CTCTGTTGTG | CTCTTCTGGA | GAGTGCACTG | TTTGTGGAAC | 300 |
| TTTCTAGAG  | TGGCAAAAAC | GATCTCCACT | GTCCGTGAAA | GGGCAGTTCC | TGAAGTCAGC | 360 |
| TCATGGTCCT | GGCTCCCCCT | CTCCCCAGCA | GTGAACTGGG | GGTGACTTCC | TGATCTGCCC | 420 |
| AGCACAGGAG | AGCCCCGCAA | AGCGCTGGG  | AGGCCCTCGA | G          |            | 461 |

## (2) INFORMATION FOR SEQ ID NO:1146:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACCATTTTGG | ATTGATTTT  | GTGTATAGTG | TAAGATGAAC | 60  |
| CCAATTTCT  | TCTTTAGCAT | GTGGGAATTC | TGTTTTTCTG | TCACCCTTTT | TTTTTGAGAT | 120 |
| GGGGTCTCAC | TATGTTGCCC | AGGTTGGCCA | TGAACTCCTG | AGGTCATGTG | ATCCTCCTTC | 180 |
| CTCAGCCTCC | TGAGTAGCTA | GGACTACAGG | CATGTGCCAC | TGTGCCTGGC | TCCAGCAACA | 240 |
| GTTGTTGAAG | AGACTGTTCT | TTATTTACTT | ATTGTATCCT | CTGTGCTCGA | G          | 291 |

## (2) INFORMATION FOR SEQ ID NO:1147:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACCCACCTGC | CCACGCCGAC | TTGGGAGGAT | GGTGGCCTGC | 60  |
| AGCGGCCAAG | AAGCCAAAAA | AAAAAATTTT | TTTTTTTCA  | GATACTGTGC | TTGATTTTGG | 120 |
| GAGAGGGGAG | AGGTGGAAAT | TCCTAAATGG | CTAATGCACT | GTTCCCTCCA | GCCCGAATGC | 180 |
| CTCCTGCCAA | ACCCCTTTTC | CCTGCTGCCT | CTGTCCCGGC | ATCCTTGTTT | TCCCTGGGT  | 240 |
| CCGAAACATT | TTTTCCGAGG | ATGAACAGGG | GACATCTTTA | GGTTTCTCAA | CTCTTGCTTT | 300 |
| GGTGTTTGCC | GCAGCATGGA | AAACAGGCAC | CCCTCGAG   |            |            | 338 |

## (2) INFORMATION FOR SEQ ID NO:1148:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| GCAGGAATCA | GATTCACCTCA | TTAGTAAGCC | GCACTCGCTG | AAGGGGAGAG | CATGAGCAAG | 60  |
| GCAGACGTGA | GCCACTGCGC  | CCGGCCTGAA | GAGTTTGTG  | TAATTGGATA | TTAGGGAAAA | 120 |
| CCACAGGATG | GATTAAGACA  | AGAGAGGGAA | GGTAAGGTTT | TAGACAGCAG | GATTATGTCT | 180 |
| GTTAGTTGGT | TTTATGTCAC  | TTTTCTAGCC | AAGCTGTACC | ATCCTGTTTT | TGTTGGTTGG | 240 |
| TGAATGCTTC | CAGCTCTTTT  | CCTCCAGCCC | TTGGAAGAGG | TGTCCTATA  | ATTGTTAAGC | 300 |

ATCTAGCTAG GGTGATGAGT AGGAATAGCA ATAAGTGACA GGGAAGTTGA AGGCTGCAGG 360  
GCTCTTTGCA GCGGCTTAC TCGAG 385

## (2) INFORMATION FOR SEQ ID NO:1149:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

GAATTCGGCC TTCATGGCCT AGTCACATGA ATGAGAGAAT TCTAAATGCA AGAAATGTGC 60  
AAAGGCACAG AAACACAGAA GAGCATGTTG TACAACCTGG CTATAGTTTA GATTTTGTGT 120  
GTGTGCTATG AGAGTGTGCG TGTGCTGTGA GTGTGTGTGT GGGCGCACGC ACGCATTGT 180  
AGGAGGTAGG GAGAAGAGTG CCGGCATAAC ATGAAATGAT ATTGGACCTC AAATGGTATG 240  
CTAAGATGTT TGACAATTTT ATTCTAAGCA GTGAGTTTTT AAATTTAGAC ATGCAATCTC 300  
GAG 303

## (2) INFORMATION FOR SEQ ID NO:1150:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 419 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

GAATTCGGCC AAAGAGGCCT AATTGAATTG TATTGGTCTT TTTCTCTTTA ATATTTTAGG 60  
TGCTTTATTA TATATTAGGA TTATTAGTCC TTAGTTTGTG AAATAAGCTG CAAATATTTT 120  
TTCCCAATT TTTCTTTTGT CTCTTTGCTT TATTTCTGGT GTTTATTTT CCCAGGTGT 180  
ACTGTTTTCT ATAGCCAAAT TATTGATCTT TTCTTTAATT GCTTTTTTGT TCACTCAAAG 240  
GAAGGTTTTC ACCACTGAGA GGTATAAAA TAATTCATC ATATTTTAC TCTTTTTTTT 300  
TGCTTATGTT AATTTTTTGT TTGGAACAAT CTCAAATCA CAGAAGTGT GTGAGTACGT 360  
TGCAAATAAC TTGTTTTTTC CTTATGCATT TCAGAGTAAG TTACCACTCC GCGCTCGAG 419

## (2) INFORMATION FOR SEQ ID NO:1151:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC AAAGAGGCCT AGCGGATGGA GTCTTTGACA GTGTTTTTGA TCTCCTGCAG 60  
ACGGCTGCTC AGGAAGCTGT TGACCCGATC CAGTTCCCGG TCGGGCCACT CCAAGAGCCT 120  
CTCCCTGGCA GGCCTTGGCT CCCGGCTTCC AGAAACACGA TTGCTGTGCT TTAGAGCTTC 180  
TGCTGCCAAC TGGGCCTTCT CTTTTCCTT CTTTTCAGC TTGTGCCGGG CCCGCTTGGC 240  
GGCCCTGGCG CTGTTGGGGA CTTTGGGCTC CGTGCTGTTG ATGAATTCCA GCAGCTCATC 300

CACATCTCGG TGGTCCACGG CGGGCTCCCC AGGGATCCCC CCCAGGGTGC CCCCCTTCAT 360  
GGGCAGCTCC TCTTTCCGCC TGGTCAGCCT CGAG 394

## (2) INFORMATION FOR SEQ ID NO:1152:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC AAAGAGCCTA CTGTGAATCA CGAACTGGCT GAGGGCGGCT GACCGCTTGT 60  
AGCTGTTCCG GCCATGCACC ATAAGAACCG GCCAAGATGC TTAAATTGAG TGATGGAGAA 120  
GTCTGCAGCC AACGAAGCCT GTTTTCCTTC CTTTCCTTCC ACTCCACGC CGCAGTCAGA 180  
TTCCTGAATC ATGCTGACGT CATTCGCTCC GTCCCCCTACT GCACAGGTGA GCTTGCCCGT 240  
GCGCTCCTGA AGCAGGCGCA CGATCTGGGG CTTCTGGGTG GGGGCACATC NGCAGCAGAC 300  
TACGGCCGGG CACTGGCAGG CCAGCTCCAT GAACTCGTAC TCATAGTACT TGAGGCAAAC 360  
CTCCAGGGAG TCTCCCGAGA TGACCAGGGC ACAATCATGC TTCCTGCGGA AGGCGTTCAG 420  
CTCGAG 426

## (2) INFORMATION FOR SEQ ID NO:1153:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GAATTCGGCC AAAGAGGCCT AAGCTGATAT TTATTGGACA TTTCACCAT GCCAAGCATT 60  
CGGCTTGAT TATCCATT GTTCTCACA GCCGTATT ATTGTCTGCT CCTCTGTGCC 120  
AGGTGCTGTG CTCTGGGCAG GGGCACTGCA TGGGCTGCCT GCCCTGTGG AGCTGTGTGT 180  
CTGATGGGTG AGGCTGACCC AAGCCCACCC CATTGCCAAC AGGGCCAGGG CAAGAGTACA 240  
CACAGGGGCC TCATACCATA TGTCTCGAG 270

## (2) INFORMATION FOR SEQ ID NO:1154:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GAATTCGGCC AAAGAGGCCT AGCTGAAATC ATTCTGAAAA CTCAAACAGT AGACTTCAGC 60  
ACACAAGGAA AGCCAAAGCC ATTGAGGGG GAATAAAGCC AAAAGCCTTT CACCTTATTC 120  
GTTCCAAGAA TCTCACC GCCCTCCTTAT CCCCCTCCAA AAATAAGCCA TTGCACACAG 180  
ACAGGCAGCA TGGCTAGCAA ACGAAAATCT ACAACTCCAT GCATGGTTCG GACATCACAA 240  
GTAGTAGAAC AAGATGTGCC CGAGGAAGTA GACAGGGCCA AAGAGAAAGG AATCGGCACA 300

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| CCACAGCCTG | ACGTGGCCAA | GGACAGTTGG | GCAGCAGAAC | TTGAAACTC  | TTCCAAAGAA  | 360 |
| AACGAAGTGA | TAGAGGTGAA | ATCTATGGGG | GAAAGCCAGT | CCAAAAAACT | CCAAGGTGGT  | 420 |
| TATGAGTGCA | AATACTGCC  | CTACTCCACG | CAAAACCTGA | ACGAGTTCAC | GGAGCATGTC  | 480 |
| GACATGCAGC | ATCCCAACGT | GATTCTCAAC | CCCCCTACG  | TGTGTGCAGA | ATGTAAC TTC | 540 |
| ACAACCAAAA | AGTACGACTC | CCTATCCGAC | CACAGACTCG | AG         |             | 582 |

## (2) INFORMATION FOR SEQ ID NO:1155:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGATCCGTG | AGGGAGACCG | CATCATCCAG | ATTAACGGTG | 60  |
| TAGACGTCCA | GAACCGGGAA | GAGGCGGTGG | CCATCCTGAG | CCAGGAAGAG | AACACCAACA | 120 |
| TCTCCCTGCT | GGTGGCCCGA | CCTGAGAGTC | AGCTGGCGAA | AAGGTGGAAG | GACAGCGACC | 180 |
| GGGATGACTT | CCTGGATGAC | TTTGGCTCTG | AGAATGAGGG | GGAGCTGCGT | GCTCGTAAAC | 240 |
| TGAAATCACC | CCCTGCCCGA | CAGCCCGGAA | ACACTCGAG  |            |            | 279 |

## (2) INFORMATION FOR SEQ ID NO:1156:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACATTGTAA  | TATAATTTAA | CAGAAGTTGT | GAAACTAAAA | 60  |
| TTTTCTAAGA | TTAACTGGTA | GTTCAATTGA | AATGAACATA | ATGAACAGAA | TTTATGACTC | 120 |
| CACGTGGGAA | AATGCTATCA | AATAACTAAG | GAATATATAT | GGAATAAGTG | TACATATGTA | 180 |
| AAATATTGTT | ACTAGAGTTA | GATATGTGCC | AAAGTCCATT | TATCCCAAAT | CCTGTCTGAA | 240 |
| AAGGAGGGGT | ACATTGGTAA | ACATTTTGA  | GTGCTTAAAA | ATGCCAAAAA | CAAAATGGTA | 300 |
| ATTTCTACTT | TGATAAAGTA | AAAAAGTTAA | ATGTGTGTAA | AAAAGTGCTC | GAG        | 353 |

## (2) INFORMATION FOR SEQ ID NO:1157:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACGGTGGCCT | TTGGGGCCGA | AGTGGGCGTG | CGGCTCGCGC | 60  |
| TGTTGCGGCG | CTTCCTGGTG | ACGGAGCTGC | TCCCCCGGTT | CCAGAGACTC | ATCCAGCCGG | 120 |
| AGGAGATGTG | GCTCTACCGG | AACCCCTACG | TGGAGGCGGA | GTATTTCCCC | ACCAAGCCGA | 180 |
| TGTTTGTGCG | TGGAGAAAGA | TCGTCTTCC  | TCCCTCCCCA | TGACCGGGCT | TCCGCGGGC  | 240 |

ACCTGTGCGT TTTCCACCCC GAGACGGCCT TTGTAGGGAC CCACTGCCCA CTCCGCTGCT 300  
GTGCGCTGGG TTCCGCCTCC TAGGGCTCGA G 331

## (2) INFORMATION FOR SEQ ID NO:1158:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 178 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

GAATTCGGCC TTCATGGCCT AAAAAGTTAG ACTGACATCT AGCTTTGACA ATCATAGTAT 60  
 GTTTTATTTT CCTGAGGGGG AATAACTTAT AATGCTGTTT AGTTTGTAC TATTGGTGTG 120  
 TTGGTGAATT TTAAACTGT GTGCTAACTG CACGATTGAA TTCTAGACCT GCCTCGAG 178

## (2) INFORMATION FOR SEQ ID NO:1159:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 401 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

GAATTCGGCC TTCATGGCCT AAGCACTTTG GGATGTTGAA GTGAGGGGAT TGCTTGAGCC 60  
 CTGGAGTTCA AGACCAGGCT GGGCAATATC GCCAGACCCC ATCTCTTAAA AAAAGTAGTT 120  
 CTTTACTGTT GCCTCTATTG ACTCTTGAAT GCAAGAAAAGA ACATTTGCCC TTGACTTCT 180  
 AATATTATCT TATATTCTCT CTTCTTCAAA AGATCAGAAG CACATGCTGT AAACATCAAT 240  
 CATGATCATC TTGTCTCCC TTATCAGATT GTCAAAATTA TATCTTTTCC TATTTTCCTG 300  
 CATACTTAT CTTTTCTTA AATTCTCAGT TCTCCAAGTT CTCAGAAATC ATAACCTCAG 360  
 ACCTTGAAAT GATGACTCTG TTCCACCCCC ATCGTCTCGA G 401

## (2) INFORMATION FOR SEQ ID NO:1160:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 350 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GGGGGGCCAG ACACGNTGG GGTAAGAAGG GCCTGGTGGG AGGAGTTCAC AGAGCAGACG 60  
 GTGCACTGGG ACCAGGAGAG CAGAACACAG GCCATACTA TAGGGCAGGT GGGGCAGGAA 120  
 CGGGTTAAAA ACGAGATCCA AGCCAGCCAG ATCGCAGGAG GTGCGGGGGC GTCGTCCCCC 180  
 TTCTGTTCTC CCCCCAAGGT CACAGTGCAT GCAATAAAAT ATATATACAG GAGCTAGATC 240  
 CGTCCTCTGC AGGGGCTCTG AGGGTCCAGA GCTCCCTTCG GGTGGCGGGA AGCCAGTGGC 300  
 GTCCTCTGGC GGCCAGGCCG GGCTGGAGCC ACATGCGTCG GGTCTCTGAG 350

## (2) INFORMATION FOR SEQ ID NO:1161:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 597 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

```

GCCCCGGAGC ATCTTAAGAG CTGAGGCGAG CTGACAACCTA GGGGCCGGAC CGTCGCAGGA      60
GGCGTCCGCT GGATACCTTC CCCCTTCCCT GACCTAGAGC TCTACAGCTG CTGCCTCGGT      120
ACTGACCGAG GGTTCCCAGA GCTGTCTCAC CATTGCAAAA ACGTTATAGC AACAGCCTCT      180
GATTACGACA TGGCTGAGAT CACCAATATC CGACCTAGCT TTGATGTGTC ACCGGTGGTG      240
GCCGGCCTCA TCGGGGCCTC TGTGCTGGTG GTGTGTGTCT CGGTGACCGT CTTTGTCTGG      300
TCATGCTGCC ACCAGCAGGC AGAGAAGAAG CACAAGAACC CACCATACAA GTTTATTACAC      360
ATGCTCAAAG GCATCAGCAT ATACCAGAG ACCCTCAGCA ACAAGAAGAA AATCATCAAA      420
GTCCGGAGAG ACAAAGATGG TCCTGGGAGG GAAGGTGGAC GTAGGAACCT GTTGGTGGAC      480
GCAGCAGAGG CTGGCCTGCT AAGCCGAGAC AAAGATCCCA GGGGGCCTAG CTCTGGATCT      540
TGTATAGACC AATTACCCAT CAAAATGGAC TATGGGGAAG AACTAAGGAA CCTCGAG      597
  
```

(2) INFORMATION FOR SEQ ID NO:1162:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 476 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

```

GAATTCGGCC TTCATGGCCT AGAAATAACT TAAAATCCTG AATCAGATGT TTCTCCGTAC      60
ATGGCCTATC CAGATCACCG TAGGGTGAAG CTCAAAGTCA GCAAGCCTCA CCCACATACT      120
CAGAGCTTCC TTTCAGTGTT GAGACCTTCT TCCCTCTGAG CAGATGACAA AGGAGTTTGA      180
AACCAGCCTG GCCAACATGG TGAAGCCCCG TCTCTACTAA AAACACAAAA ATTAGCTGAA      240
ATGGTGACTG TAATCCCAGC TACTCAGGAG GCTGAGGCAG GAGAATCGCT TGAATCCGGG      300
AGGCGGAGGT TGCACTGAGC TGAGATCGTG CCATTTTATT CCAGCCTGGG CAACAGAGCA      360
AGCCATCACA GATTTGGGAG CAACCAAGAA AGCCAGGGAC AGGGTATGCT TGGTAACTTG      420
GCAAGAGCTG ACAAAGGGGA AAAATAAAAC CCCACAGAAA GAGCAGGGAA CTCGAG      476
  
```

(2) INFORMATION FOR SEQ ID NO:1163:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 482 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

```

GAATTCGGCC AAAGAGGCCT AGATGAACAT GAACCTGCGG GAGCTGTACC TGGCGGACAA      60
CAAGCTCAAC GGCCTGCAGG ACTCGGCCCA GCTGGGTAACT CTGCTCAAGT TCAACTGCTC      120
CCTGCAGATC CTGGACCTCC GGAACAACCA CGTGCTAGAC TCGGGTCTGG CCTACATCTG      180
CGAGGGCCTC AAGGAGCAGA GGAAGGGGCT GGTGACCCCTG GTGCTGTGGA ACAACAGCT      240
CACGCACACA GGCATGGCCT TCCTGGGCAT GACACTGCCG CACACTCAGA GCCTGGAGAC      300
  
```

GCTGAACCTG GGCCACAACC CCATCGGGAA CGAGGGTGTG CGGCACCTCA AGAACGGGCT 360  
 CATCAGCAAC CGCAGCGTGC TGCGCCTCGG GCTGGCCTCC ACCAAGCTCA CGTGCGAGGG 420  
 CGCGGTGGCG GTGGCGGAGT TCATCGCTGA GAGCCCCCGC CTCCTGAGAC TGAACCTCG 480  
 AG 482

## (2) INFORMATION FOR SEQ ID NO:1164:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

GAATTCNGCC AAAGAGGCCT AAGGAGCGCT GTTAAAGCTG ATACATTCCT GTGGGTCAAC 60  
 TATGCAACTA ACTCAGATTT TGAGCAAACA AAGCTCTCAA GTTGGTGATC CTCAGGAGTC 120  
 TCTGCATTAG TTGGACAGCT CTTCTGGAAT TATCTTCTAA GTCAACTGTG GGTGGGTAG 180  
 GTGGCTCTGC TGATTTTTCG CTGGACTTCC ACATTGGGA CCAGTTGGCT GTNATCAGCT 240  
 CTAGAAAGGG TGTGGCTGTT TTACATTGGC TGTTTTCCTC ACATTCCTCA AGCAGGTACT 300  
 GTAATAAAGA ACTGGAGAAA TACAGTCAGA TGGGAAGTAG CCCCTGCTGT CAAGGAGCTT 360  
 GCCATCTAAT GGGGGAGACA GGCAAGTAAA CCAAAGACTA CACAGTGCAG TATGGTAAGT 420  
 GCCATGATTT TGATGTGACA GGGCACAGTG GACGACCTTC CAAATCAAAG CAAGTAACTA 480  
 GGGGCAGACT CGAG 494

## (2) INFORMATION FOR SEQ ID NO:1165:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

GAATTCGGCC TTCATGGCCT AACTCTTATC TGTGAACACA ACTTTTCAGC ACTACAAATG 60  
 CAAGCAACTG CGCAGTCACA GTTGGGGCTG CTAATTTGGA AATCCAGTTT AGGCTGATTT 120  
 GAAAAGACAA CAGCATTTTT GCAATCACTG GTGTATCCTT TACGAGAGAG CTAGTCATGC 180  
 CATTTTTTGT TTTCTGAAGA CGGCCTTTTT TTCTTTTTTA TTATTATAT TTTTTTAAAT 240  
 TTGGGATCTT GCCTAATTCT TTAGTACAAA GCCTGGCCCT AAAACCGTAG AGCTCGAG 298

## (2) INFORMATION FOR SEQ ID NO:1166:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

GAATTCGGCC TTCATGGCCT AGATAGAAAA GAATATTCCA AGTGTATGAA GTATAGAGGT 60  
 GGGGAAGTTC AGGGTAGAGA AGTANTAGCA GGAATAGAAT ATAGGGGGAC AGAAAAATAG 120

```

AGTGGAGCCA GATTCAGAGA ACTTTNAGAA GCAGGTAAAG AAGTTTAGGA TTAATGGACA   180
AGTCATTGGG TCTCCAGGTT TCTTTGAGGG AGAGTGATAT CTGAGCTCTG TTTTAGAAAG   240
ATTAATCTGA AAGGAGGTAA CTCGAG                                     266

```

## (2) INFORMATION FOR SEQ ID NO:1167:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

```

GAATTCGGCC TTCATGGCCT AGGTAAATAA TGCCAAGTTA CTGGGGTCTA GAAAGAAAGT   60
TTTCTCTTGG ATCAAGAGAG TGTGAGTTTC CTAAGTTTCT TCAGCAGGGA TGTTGGTCCT   120
TTAGTTAGGA GGTTTAAAT CACCAGGAAG TAAGGGTGAG GAAGAAAGTC TGGGTCCATG   180
TTTGAGAAGG TGACTGATGG TGGTGAAGT CCTTCCTGTG ATGAGTTAAT GATGCGTATT   240
TCTGATAAAG ATGGGAAGTT ATTTACATCG ACATTAAACCA AATCTACCCT TCATGCAGAA   300
AGAAAGAGCT CTGGGCCAT TCTCTATTAA TGAAACCATA CCAGGGTCAA TATTACAGTG   360
TCTCTGAAAT ACACTGAAAA TACTTCCCTG GCTCAGGTGG TGGCCCATGC TACCTCCAGG   420
CAGTTCTACT TGATTAAATG TGCAATGGAG ATAATCCTAT TGCATCCACC ATCAAGGAGA   480
GTTGGGCAGT CAACTCGAG                                     499

```

## (2) INFORMATION FOR SEQ ID NO:1168:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

```

GAATTCGGCC TTCATGGCCT ACACAAACAA ACCCAGAATA CTCTATTACT GTATTGTGG   60
GGTACAATCC ACTCAACTCT ATTATGAAGC CCAAAAAATA AATCTGTAA AAACAATAAT   120
AGCTACACCA ACCTGTAAAG AGATAGGTAA TATAAAAATA TATAGTTTGA GACAACTAAA   180
TCAAAATGGA GGAGGGGATA GAGTCAAGA AGTAGAATTT TTTTGCCTGT GCTTTTCTTG   240
GCCTTTGTTT GCTTCTATTC TTTTATTTGG AATCAAAGAT AAGTTATCAA CTCTTTAAAA   300
TAACTTGTTA TATGTATAAG ATGTTTCTG TAAGCCTCAT GGTAACCACA GTACAAAAAC   360
CTATAGTACA ATTCCTAAAA ATAAATACA AAAAAATTAA AATATACTAC CAGAGAGCTC   420
TCGAG                                     425

```

## (2) INFORMATION FOR SEQ ID NO:1169:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

```

GAATTCGGCC TTCATGGCCT AAAAGGTTTG ATCTTGTAAT GTGTCACTGT GTTCCTTAG      60
TGGCCAGCCA GCCTTCAGAA TAGCTAAAGG CCTTCCTTCC TTCCAGTCAG CCTGAGAGAG      120
AACACCTGTC CCCTAAGCAC CTGGTGTCTC CATTGGAGGC AGACTGCTCT CAGGAGACTA      180
CTAGAAGCTT CAGCCCGGAA GACAGGCTGC TCTCTCATGC TGGTGGCCCA AATTGAGAAA      240
GTGGTGTCCC TTCCTGATT TGCCACCAGC CCTACCGAAT AGTTGTAAAC CAGTATCAGG      300
AATTGGGATC CTCTCGAG                                     318

```

## (2) INFORMATION FOR SEQ ID NO:1170:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

```

GAATTCGGCC TTCATGGCCT ACATTGGTCG TTTTATTGCC ATGGCACTAT TTCATGGAAA      60
GTTTATCGAT ACTGGTTTCT CTTTACCATT CTACAAGCGT ATGTTAAGTA AAAAATTAC      120
TATTAAGGAT TTGGAATCTA TTGATACTGA ATTTTATAAC TCCCTTATCT GGATAAGAGA      180
TAACAACATT GAAGATGTG GCTTAGAAAT GTACTTTTCT GTTGACATGG AGATTTTGGG      240
AAAAGTTACT TCACATGACC TGAAGTTGGG AGGTTCCAAT ATTCTGGTGA CTGAGGAGAA      300
CAAAGATGAA TATATTGGTT TAATGACAGA ACGGCGTTTC CTCGAG                                     346

```

## (2) INFORMATION FOR SEQ ID NO:1171:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 240 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

```

GAATTCGGCC TTCATGGCCT ACACCTTATT CCCTTTTAAG TCTGGTAAAG AATGAATACT      60
TGGACGTTTT GTTTCATGCA GATTTAGTTA GCAACTCGAT TATCAAATGG TAGAATATCT      120
GTATGCACTG AAGCCAAATT CTCAGTAACT CAGCTTTTGN TAGTCATATG AGGATGATGA      180
ATAATAGGAN TCCAGAGCAG TTAACAAATT GATACAAGTG GTAGGAAAAT TTGATATGAA      240

```

## (2) INFORMATION FOR SEQ ID NO:1172:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 277 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

```

GAATTCGGCC TTCATGGCCT AGTTTCNTTT TTGTATCTCT ACTGATATCA CCAGGATAGT      60
NTACTCTCCT TCTAGCTTTC TGCTTACCGC ACACTGGATA ACACACACAT ACACACCCAC      120
AAAAATGCTC ATGAACCCAA TCCGGAGAAG GTTCCAGCAG GTCCCCCACC CTCCTCCTCT      180
CCTCCTACTT CTCCTCTTGA CAGCGAGGAC AGGAGGGGGA CAAGGGGACA CCTGGGCAGA      240

```

CCCGCCGGCT CTCCCCCAC CCCACCCCA TCTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TCATGGCCT  | AGAAAAGTCT | AGAAAATAGC | TTAAATAACA | AACACGTGTG | 60  |
| GATTTGTTAG | ACCAAGAGCA | AGGGAGACCA | TTTAATGCAG | TTATTTAACA | ATATTTAGTA | 120 |
| CTTTCCTTTA | CCTTGTCTGC | TGTGCCATCA | TTCATGCCTG | TCAGTGTTAA | AAATCCCCAA | 180 |
| ATTTCCCAA  | CAGATTTTCA | TTTCACTTCC | GTCAACTTTT | AAATTAAAGT | TTTTAAATTC | 240 |
| CTGTCCCCAC | TCCTCGAG   |            |            |            |            | 258 |

(2) INFORMATION FOR SEQ ID NO:1174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| GAAAGTTGCT | TTTGATGTCA | AAATGGAAAA | TGAAAAGTTA | GTTTTCATCAT | GTGAAGATGT | 60  |
| GAGGCATCAG | TTAGAAGAAT | GTCTTGCTGG | TAACAATCAG | CTTCTCTGG   | AAAAAAACAC | 120 |
| TATTGTGGAG | ACTCTAAAA  | TGGAAAAAGG | AGAGATAGAG | GCAGAATTGT  | GTTGGGCTAA | 180 |
| AAAGAGGCTG | TTGGAAGAAG | CAACAAGTA  | TGAGAAAACC | ATTGAAGAAT  | GTCTTGCTGG | 240 |
| TAACAATCAG | CTTCTCTGG  | AAAAAAACAC | TATTGTGGAG | ACTCTAAAA   | TGAAAAAAGG | 300 |
| AGAGATAGAG | GCAGAATTGT | GTCGGCCACT | CGAG       |             |            | 334 |

(2) INFORMATION FOR SEQ ID NO:1175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TCATGGCCT  | AGTGCTTGAA | CTCACGCATC | TGTTTACCT  | GCATCTGCAG | 60  |
| GCGATGGGCG | AGGGGCCACG | GAAAGAGTCT | GAGGGCTGCT | TGGTGTAGTC | AGGTTGTGTC | 120 |
| CAGGCATGCG | GAGCTGTGAG | TGCCTGCAGG | AGAGACACCC | AGGAGGAGTT | TTTACATTTT | 180 |
| GGTCTAAAA  | GCTCTGGAT  | TCATCTCATC | TCATGGAATG | ATCCTGTCGG | ATGACGCTGA | 240 |
| CGTGATTGCT | TCAGACTTAG | AGGTGAATAA | ATTGAGGTCC | AGAGAGGTCA | CAGTCACGAA | 300 |
| GCTCATGGTA | GACTGAGGCC | ACTAACACC  | CGTCTCCTGA | TTTTCAGTGG | CGTCTTCATT | 360 |
| TGCATACACC | TGGGCCATCT | TGGTTTTTGC | AAGAAAATC  | GAG        |            | 403 |

## (2) INFORMATION FOR SEQ ID NO:1176:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 590 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

```

GAATTCGGCC TTCATGGCCT AGGTACCTTG AACATGGCTG TAAATTAATC TTTAACTGCC      60
TTGGTGGAGT CTTCTCGATT TATTGAAGAG AATAATCAGG AAAATAATTT TTGTTTGTTC      120
TTTGAGACGG AGTCTCGCTC TGTCACCCAG GCTGGAGTGC AGTCCCACGA TCTCGGCTCA      180
CTGCAGCCTC TGCCTCCAGG GTTCAAGTGA TTCTCCTGAT TGAGCCTCCT GAATAGCTGG      240
GATTATAGGT GTGCACTACC ATGACCAGCT AATTTTGTGA TTTTATAGTAG AGATGGTGTTC      300
TCACCATGTT GGACCGGGCT GGTCTCGAAC TCCTGACCTC AGGTGATCTG CCCTCCTCAG      360
CTTCCCAAAG TGTGGGATT ACAGGCATGA GCCACCGCAC CTGACATAAA TATTTAATGT      420
AATACCGTGT AAGACTTTTC CATTGGGTTT TGAGAAACAC GTTAATGAGA GAAATTGCCT      480
AACATTGGAG AGGATTGCAG AGAATATTGA CTAATATGGT GGGGTGAGGA GGAACAACAT      540
CAATTAAGAT TCAGATTAT TATTTAAAAA AACTAAAAGG CGGCCTCGAG      590

```

## (2) INFORMATION FOR SEQ ID NO:1177:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```

CTCGAGGTAG CCACAGTCCT GATCCTAGTG ACAAATGGGG GCATGTGTCT ACATCCGGGT      60
CGGCGGAGGG CTCATTTTCAT CTGGCCTGGG GGGAAATGAG TATTAATTTG TTTACACAGA      120
CGTAAACACA GCCCAAAACG CATCAGCAGC TTGACTCAAA CGCCCGCAAC GCCAGGGCAA      180
AGGCAATTTG GTTAACAGGG GGAAGCGAAC AGACGGAGAC GCCTGGAGAC CCAGGTGCCA      240
CAACCCGTTT AATCGCGGTG CAAATAAGGG CAAGTCCCTT CCCCTTGCTC GTGTGGTCTT      300
GACAACGACA CTAGTTCATT CTACTAACAA GCGGGGCGGG GGGTCAGATG GGCCACACAC      360
ACCCATTTTC CTCAACGGGA CCCCAACGCG ATCTCAGCCT TGCTGTGCTA CTTTAGGGCA      420
AGACGCGTTC CCCATTGCGA AGCCGCAGGA AAGCGCGGCG AGAGCGGGTT AGCCCTCGGA      480
GCGGCTAAGA GCCTCGGAAT AGCGCAGAGG AAGTCCCCAC CCCTCTCGGG GCTGGGAGCC      540
CTAGGCCATG AAGGCCGAAT TC                                     562

```

## (2) INFORMATION FOR SEQ ID NO:1178:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```

GAATTCGGCC TTCATGGCCT AGAAGCACAG GTAAACAAG CTGGGGCTTA TGTCAGCAT      60

```

```

TGGAAGCAGG GAGCAGAGTG GGGAAAACAG CAGTCTTATG GGAAGTGAAC CTCAATCTGT 120
GTGATCTGAC TCTATCTGCA AGGTAGTGTT GGAAGTGAAC AGGGTTGGAG AATGCCCAGC 180
TGGTGTCCAC CGCAGAATTG ATTTTCATGTT TGGTATGCAG GGACCCCCCA CTCCACACTT 240
AGTCACAGAA ATCTGTGTTG ATGTTGTGG CATGAAAGCA GGGAAAAATA GTTTGTTTTT 300
TTCTCCACAC TTCCTTCCCA AGATCCCGGC TAACTCGAG 339

```

## (2) INFORMATION FOR SEQ ID NO:1179:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

```

GAATTCGGCC TTCATGGCCT ACTCACCGGA GAAAAGAAGT TTCNGAAGAA AACCACAACC 60
ATGCCAATGA ACGAATGCTA TTTCATGGGT CTCCTTTTGT GAATGCAATT ATCCACAAAG 120
GCTTTGATGA AAGGCATGCG TACATAGGTG GTATGTTTGG AGCTGGCATT TATTTTGCTG 180
AAAACCTCTC CAAAAGCAAT CAATATGTAT ATGGAATTGG AGGAGGTACT GGGGTGCCAG 240
TTCACAAAGA CAGATCTTGT TACATTGACC ACAGGCAGCT GCTCTTTTGC CGGGTAACCT 300
TGGGAAAGTC TTTCTGCAG TTCAGTGCAA TGAAATGGC ACATCTCCTC GAG 353

```

## (2) INFORMATION FOR SEQ ID NO:1180:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

```

GAATTCGGCC AAAGAGGCCT ACAGAGTGCT GTGCTTAAGT TTTACTTCTT TCCACCTTTA 60
AATCTCTGAT AAGTTTCTTT TTATCTAAAG GTTCCACTTT GTTCATTACT TTTTGTTTCC 120
TTATTATTGA TTGTTTCGAG AACCTGAGTT TCTTGACCTG TGTGATTTG TACCACCTGG 180
ACTTCTGAC TGTGTTTGCC CAGGCTGGAG AGCAGTGGTG GGATCATAGC TTACTGGACT 240
CAAGCCATCC TCCCGCCTCA GCCTCCAAG TAACTGGGAC TATGGGCACA CTCGAG 296

```

## (2) INFORMATION FOR SEQ ID NO:1181:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

```

GAATTCGGCC TTCATGGCCT ACTTGAGTTG TACATTAGAT CTTTAAACTT GTTAGTCCTA 60
CATATCTGCT ATTTTTTATC CTTTGACCTA CATTTCCTCA TTTCTCCCA GTGTCTCTC 120
CCCAGGTAAT CATTGTTTTA TTCCCTTTCT CTGTAAATTT GACTTTTTTT TTTGGATTCC 180
ACATATAAGT GAGATCATGA TCATGCGGTA TTTTCTTTC TGTGCTGGC TTATTTCACA 240

```

TAGTATTATG TCCTCCAAGT CTACCCACGA ACTCGAG

277

## (2) INFORMATION FOR SEQ ID NO:1182:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

```

GAATTCGGCC TTCATGGCCT AGAGATACTG GCTGGCAATT CTTGGCGTTC CTTGGCTTGT      60
AGCTGTAAGA TCGCTCTAA TATCAGTCTC TGTTGTCATT TGCCTTTTCT CTGTGTCTGT      120
GTTCAAATGT CCTTTTTTTT TTTTITTTTA GGGAGTCTTG CTCTGTTGCC CACTCAAAC      180
GCTGGGCTCG AG                                         192

```

## (2) INFORMATION FOR SEQ ID NO:1183:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

```

GAATTCNGCC AAAGAGGCCT AGTAAATAGT TGTCTGTGTA CATTTGTTAG AGAATAATGA      60
CAAGAACAAA AATCTGTGTG TTCAGTATAG ACACAACCAT CCTTTTCTTT TTTTITTTT      120
TGAGACAGAG TCTCGCTCTT GTTGCCCGAG CTGGAGTGCA AGGGTGCGAT CTCAGCTCAC      180
CGCAACCTCC GCCTCCCGGG TTCAAGCAAT TCTCCTGCCT CAGCCCCCGG AGTAGCTGGG      240
ATCACAGGCA TGTGCCACCA CGCCCGGCTC TTTTGTATT TTTAGTAGAA CTCGAG      296

```

## (2) INFORMATION FOR SEQ ID NO:1184:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

```

GAATTCGGAC TACTACAGGT GATACTACAG TGA TACTACTAC AGTAATTCGG ACTACTACAG      60
GTGGCTAATT CGGATTACTA CAGGTGGACA TAATTCGGAC TACTACAGGT AATTCGGACT      120
ACTACAGGTG AGCTAATTCG GACTACTACA GGTGGACATA ATTCGGACTA CTACAGGTGC      180
ACCTGTAGTG GAGAACATTT AGCAATGATA AAGCCGCTGC TGATCCTTCT CGAG      234

```

## (2) INFORMATION FOR SEQ ID NO:1185:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGAACAGTTT AGAAACAATT TCCCTGCCTT TGCTTTGGGT | 60  |
| TCCCTGTGAT TGTCTCCAC ACTGTTTTC TGGCTCTATC TGTCTCCCTT GCCACGGCCA   | 120 |
| CTCAAGCCTA GCTGCCCAAC AGCTCCTTCC CTGAAGAACC CCGGCCTTCA GGCTTGACAG | 180 |
| GTGATCTCAT CCCTCTTCTT TTCTCCAGG TTGTTGTAGA CTTCACCTT CCCTTCTTCT   | 240 |
| CCTGGTCCTT TCCCCTTCT AGTGCCAATG TGGGCCACGC TTTCATCCA CCTACTCGAG   | 300 |

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 324 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AGTGATGAGC CCTCCTCTTC AGCTAGGAAA ATGACGGTGT  | 60  |
| TCAGAAAGTT AAAACTTCTT CGCTGGAAGG ATTTTCATCTT AAAGTTGGGA GACTGGAAGA | 120 |
| AATTAAAGTG TTCTAAATGG AAGAGCATTC ACCACATGTG TTCTGTTTGG GGTGACATT   | 180 |
| TAGCTTTTGT TTTTATTTTA GAAACGGAAG ACTCTGGTAG CAGTCCTTGA AATCTTGATG  | 240 |
| CCATTGCTAT TTTCTGCATT GTATTGTATC TTCGTTTGTAG TAGTGCTCCA ATAAAAAGAC | 300 |
| CTGCTACTAG CTGCAAACT CGAG  | 324 |

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGTACGTTGC TGAAAAGAAG TTTATTGCTA TTTTCTTATT | 60  |
| TTATTATACA AACTAGATT TGCTTAAAC ATTTCCAGT CTCTTTAAAG GAATGCTAGT    | 120 |
| TAGTGGGAGG CCACAGCTAG TAAATTACCC TCAGTAGTGG TTTCAGTAG TCCATAACTA  | 180 |
| TAAAAATCGT TACGGCCAGG ATATGCCGGA ACAGAACACT CCCCCTGGG GTCCTCAGCC  | 240 |
| TTGGATGTCA GCTCGGCCCC TCAAGGGGTC CCTACACCTG GAAGCTGATT CCACTCATCA | 300 |
| GTCTCGAG  | 308 |

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

```
GAATTCGGCC TTCATGGCCT AGAATGAAGA AGGTTCCCAA GAAGTTAGAG GAGATTCCCC    60
CAGCCTCTCC GGAGATGGCA CAGATGAGGA AGCAGTGCCT GGACTATCAT TACCAGGAGA    120
TGCAGGCTCT GAAGGAGGTC TTCAAGGAGT ATTTGATTGA ACTGTTTTTC TTGCAACACT    180
TTCAAGGGAA CATGATGGAT TTCTTAGCTT TCAAGAAGAA ACATTATGCC CCATTACAAG    240
CACCCTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

```
GAATTCGGCC TTCATGGCCT AAGGAGTTGG AAATTGTGCA CAAAGAAAGG TGGTGAATAA    60
GTAAAGTCGT AAATTCAAGA CCACAACAGA AAGCTTCACT GCAGACACTG GACTTGAACC    120
ACCATTGAAA ACAGTCAGGA TTTGGAGATG ATAATTAGGA GGATGTGTAT TCTAGCTGTG    180
GAATTTATTG TGGGCAAGCA TAGGAATGAG AAAGTACAAT GAAAAAATGT AAGTAGACCC    240
ACCAAGTTAG AGAAGAAGGT CCTGGTTAAG AAAAAATGAAA GATTTTTTTG AACACAGAT    300
TAATGTGATG AAATAGATGT TCAAGAGTGA AGATAAGTTG AAGATAGGGA CCCCTCGAG    359
```

(2) INFORMATION FOR SEQ ID NO:1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

```
GTTGTTAGGC TGGTGTGTT ATGTTGCTGT TGTTATGCTG GTCGTGCTGC TCCATGTTCT    60
CCAGGTGTTC TTCCCTTTTA TCGTCACAGT TACCCCGTAC ACCTGACAAC TGGACATCTG    120
CGCCTGGGGT CTTCAGCCTA AACACACCTA AACCCCTCCAC CAAACCCCTC TGCTTCCGCC    180
TCCCGGTGTC TGTGAGCGCC TCCACTGCCC ATCCCTCTGC TCAGGCCCCA TTTCCAGGGC    240
TCGAG                                     245
```

(2) INFORMATION FOR SEQ ID NO:1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

```

GAATTCGGCC TTCATGGCCT AGTCTCAAAA AAAAAAAAAA AAAATAGTGT TCAGCAAGGT      60
TGAAGCATAA AAGGTTAATA GCCAGAATCA TTTATCAATT GTATTTCTAT ACATCTACAA      120
GACACAATCT GAAAATGAAA TTAGAGAAAC AATTTCACTG GGCAACAAGA GCAAACTTC      180
ATCTCAAAAT AATCATCATC ATCATCATCA TCATCATCAT CATCATCTAC AATGTCATTT      240
CCCATCCAAC GCTCGAG                                     257

```

## (2) INFORMATION FOR SEQ ID NO:1192:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 748 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

```

GAATTCGGCC TTCATGGCCT AAGGACATGG CAGAGTTCCT GCTAAAAGAG AAGACAGTTA      60
TTTAAGGAGG TTTGAGATTC AAGGGCTTTT TTAATTTTAA AATTAACCAT GGTAGAAACC      120
TGTGTGTTAA TATGCTGAGG GAAGTTGCCA ATAGTGAGAT GAAAGATCTA GGCAAGGGGA      180
TAGCAAGGTG ACTGCACCAG ATACCTGGAT CTGGGCAGGA ATAAACCTCA ACAGTGATCA      240
TGTTGACCTT GAGTGACAGG GTATAATGTT TGGGAAGGTG CTTTGTAAC TATAAGGGGC      300
AATACAAACA TGTAAGTACAC CTTCTCTGAG ATCCGGGAAA GGACAACCTG AGCATAGGTT      360
GGGGCTGGTC ATAGGCCACT CTCCTACT GTTTCTCTAG AGTGTGTGTA GTCCCTAGCA      420
AGTCTCAGAT GCCTCGACCT TCATGGCCTA GAGAGTTCTC ATCAGAACAG GAAGGCAGTG      480
ATGATCCATT GCATGGGCAG GATTGTTCTA CGAAGACGAA GATCTCCGGA AAGTGAAGAA      540
GACCCGGAGG AACTAACCT CAACCTCTGC CATCACAAGG CAACCTAACA TCAAACAGAA      600
GTTTGTGGCC CTCCTGAAGC GGTTTAAAGT TTCAGATGAG GTGGGCTTTG GGCTGGAGCA      660
TGTGTCCCGC GAGCAGATCC GGGAAAGTGA AGAGGACTTG GATGAATTGT ATGACAGTCT      720
GGAGATGTAC AACCCAGTC GACTCGAG                                     748

```

## (2) INFORMATION FOR SEQ ID NO:1193:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

```

GAATTGCGAA CATGGCAGCG CGTTGGCGGT TTTGGTGTGT CTCTGTGACC ATGGTGGTGG      60
CGCTGCTCAT CGTTTGCGAC GTTCCCTCAG CCTCTGCCCA AAGAAAGAAG GAGATGGTGT      120
TATCTGAAAA GGTTAGTCAG CTGATGGAAT GGAATAACAA AAGACCTGTA ATAAGAATGA      180
ATGGAGACAA GTTCGTCGC CTTGTGAAAG CCCACCTAA TCTCGAG                                     227

```

## (2) INFORMATION FOR SEQ ID NO:1194:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGTATATATA TAAAATACTG AGGATTTAGG GCTGATGTAT | 60  |
| ATAAATAAAA TACTGATAAC TTTTTCCTT TCTTTTCTT TTTTTTTGA GATAGTGTCA    | 120 |
| TGCTCTGTTG CCCAGGCTGG AGTACAGTGG CACCAAACCG CTAACCTGCG CCTTGCCCTC | 180 |
| CCAGGCTCAA GCAATCCTCC TGCCTCAGCA CCCTCAATAA CTGGGACCAC AATTGCATGC | 240 |
| CACCAAACGC ACCTCGAG   | 258 |

## (2) INFORMATION FOR SEQ ID NO:1195:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 314 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AATGAATTCT CATTTCCTGG AGGCTGAAGA TCTGTGCAGG | 60  |
| TGTCTGTGGC CAATGTTAAG CCTACGACTT TAGATGAGCT GGCATAAATC TTGGGAGAGT | 120 |
| TTTCTTGTCT GTGTTCCCTC TGAATTTCTC TGTGCTGTTA GAGGCAGGGA CAGAAGAGAA | 180 |
| CCAGCATGGC AGTGCTGGGC TCAGGGTGAT GCCTGCCTGC CAGCACAGCG GTTCTTGTCC | 240 |
| CTGTCCCACA TTGCTTCTTG GAAGCCTTTT TACAGCCTCA ATCATCTTGC TTTTCTTACC | 300 |
| GCAGCTATCT CGAG   | 314 |

## (2) INFORMATION FOR SEQ ID NO:1196:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 385 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGCGGG GACTTCCACT CTTTCTCGTT TTCTCGGAGC TCCGCCTCCA | 60  |
| GCTCCTCTAT CTTCTCTTC AGCTGCGTGT TCTTCTCCTC TCTGTGGATC TCACGGCCTC  | 120 |
| TTCTCTGTCT CCACGCTGGC CACCGACTCC TGCAGCGCCG TGGGCAGCCG GGCCTCGCTC | 180 |
| TCCCGCCGGG TCTGCAGCTC CATCTCCCAC CTCTTCCCGT GGGCAGCTCT CTGCGTCGAG | 240 |
| GCCGCCTTCA GCTTGTGGTT CCCAGACTGC AGGTGCGTGT CAGCTGCAGC GGCCTGAGAG | 300 |
| GCCTTTCATC GTCCGTCCCG TTGACACTGG ATGCCGGAGT AGAAGATGGG GCTCCATGCC | 360 |
| CGGATTCTCG GGATTATTAC TCGAG                                       | 385 |

## (2) INFORMATION FOR SEQ ID NO:1197:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

|   |    |
|---|----|
| GAATTGCGAG TGAACCGAGA TTGTGCCATT GCACTCCAGC CTGGGCAAAA GAGCAAGACT | 60 |
|---|----|

CCATTTCAAA AAAAAATCTT AAAAATACGA AGTTTTTCAT TTTTCTTAAA TTTTCATTGT 120  
 GACTACTTTA GTAGACTTGC CAGTAATAAG CCAGTTACCG CTTGAATCTC AGTTTCTTTA 180  
 TCTGGAAAGT GGTCAATTAT TATCTGCTGT CCCCTTACCT AGAGGGAATC AAATGCGTTT 240  
 GATACAGGTT CTCGAG 256

## (2) INFORMATION FOR SEQ ID NO:1198:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

GAATTCGGCC TTCATGGCCT AGAGAGCCCA TCTCCATCTG CCAGCCTGGA AGCAGCCATG 60  
 GCAAATGGGA TGTGTCCCAC TGCCCCCGTT TGGTGCCACA GTTGGGTTTA TTCTCACAGC 120  
 TGCAAACCCA CGTGTCTGGC TGCACAGCTG CCTGAACGAA GCTGGAGCGT GCAGAACAAA 180  
 CTGCATGGAA TGTCACGTGG GGTTTTCCAC TCTCGCCCAC AGTGAGTTGG CAATGCGCTGG 240  
 CCACGTGTGC TCTGTGGTCT TTGAACTTGA TCTGGGAGGA CAGAANTTCA AAAGGAAGAT 300  
 GAAGGCCCCA GCAAGGGGAG TATTCTGTGC TTGAGCAGAA GGTAAAGGTA GAAGGTGCAG 360  
 ATTAGGTACT GGAATAGTC ATGGTTTGGT TTGAATGGAG TAGAAGATTG CAGAGGAAGA 420  
 GCAGTGGGCG ACAGTGGCTC CTCGAG 446

## (2) INFORMATION FOR SEQ ID NO:1199:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

GAATTCGCCT TCATGGCCTA AATTGTAGCT AGGAAAATAA TATATGTCTT AGTTTAAGAA 60  
 CTCATACTCT GGAATCAACT CATTGCACTT TCCTATATGT TTGGCCATGG GCAAAGCACA 120  
 TAACCTCTTA ATCAATTGGC TCGTCTCCAA GGTGAGGATA GTTATACTTA ATCCTCTTTA 180  
 GGAGTGAGAA TAAAAATTAA ATATGTGTGT AGCATAGTGT CTACAATGTT AGAGGTATTT 240  
 GAAAAGTGAT AGTTTATTTT TTGGAATTAT TTAGCATTAT TAAAAACAAG GGGGAGCACA 300  
 CGGTGGCACC TTTCTGGTCC CAGCTACTTG GGAAGCTGAG GTAGTAGGAT CGCTTGAGAT 360  
 CCGCTCGAG 369

## (2) INFORMATION FOR SEQ ID NO:1200:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

GAATTCGGCC TTCATGGCCT AGACAGGTTG CTAGCTACAT GGGTCTCTGA AGAAGAGTTT 60

```

TCCAGCAGAA GGAGCAACTA GTGCAAAGCC CCTGAGACAC AACTGCACCT ATCCAGATTA 120
AGGACCACGG AGGAAGCCAC TGTAGGAGCA CAAAAAAGT AGGAGATGAA CAGAGAGGTG 180
AGGGAGGCTC CGTAGGTCTT AGTATGCACT TTGGCATTTA TTTACTGATT GAGATGGCAG 240
GTCATTGGAG GATTCCGAGC AGAGGAAGGA TATAATCTGA CATTTTAGCA GGATCCCTTT 300
GAGTAAGTTA GCTGCGTAGA CCTAAGATGA ACAAGGACAG CCACAGCAAG ACCTGTAAGG 360
AGACTATCCT TGTAAATCCAG GCAAGAGATG ATGGCAGCTT GGACCAGGT AGTAGCAGTG 420
GAATTGATGA GAAGTGGTTG AAATCTGGAT ATATTTGAA GATGGAGCCC ATGGGGTCTC 480
GAG

```

## (2) INFORMATION FOR SEQ ID NO:1201:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

```

ACCATATAAT TTGCCACTTG AAGTGACAA ATTCAGTGAC TTTTAGTAA TTCACAGTTA 60
TATATTCATT AGGATATTCA GAGTTATATA TTCATCACCA CAGTCACTCT TAGAACATTT 120
TAATAACCTC AAAAAGAAAC CATGCACTCC TTAGCCATCA CTCCTAACCC AACTCTCCCT 180
CTACCGCTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:1202:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

```

GAATTCGGCC TTCATGGCCT ACTTTAAACA TGTGGTCTTA CTGCCTGCAA ACACATACAG 60
ACTCTTAATT TTTATTTTACA TAGATGTAAA TATACACATA TATTACTCTA AAGATAAACC 120
TTAAGGGTAA GAAAATTATA AAGTATGTGT GTTTNTGTGA ATATGAATTT GTACCTATAT 180
TCAGAAGAAA AGAGCAATAT TGGCACAAAA CAAATCATCT TAATAAGGTA ACTAATTGGN 240
TGNGTGCACT GGCTCACGCC TGTAATCGCA TCACACTCGA G

```

## (2) INFORMATION FOR SEQ ID NO:1203:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

```

GAATTCGGCC TTCATGGCCT AGTGATCTAC TTAGGTAGCT CCTGGAAAGC AAAGGAGAGA 60
GAGCAAGACC TGACAGACT TTGTTTATGA GGAAAGCTAT ATAAGGATTA TAAGAACTGA 120
TAAATATTTC TTTGTTTCCT TTTTGACAAA ATGGATTTC TTAGTTTCT TAAGCAGATG 180

```

TATTATTCT GGGACGTTT AGCCATGTAG TTTCTTTTTC TTCCTCTTGT ATACCCTGAA 240  
 TAACTAGCCT TAGAAACACA AGTAAAGCTC CCAAAATTC ATTTTCTACA TATTTTATTA 300  
 CCAGATTGAA TTCTAGACCT GCCTCGAG 328

## (2) INFORMATION FOR SEQ ID NO:1204:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

GAATTCGGCC TTCATGGCCT AGGTCCTAAA AAGAGTAAAA GGTGAAAACA CTAAGTGATA 60  
 TTCNAAACAA AAGAAAAAGA TGAAAAATAA GAACCTTGGT TAAAGAGCAG TCGAAATAAG 120  
 TAATGATTAT AGCTATGATT TATATAGCAC TTNTTACAAG AAGCCAGGCG CTGTTTAAAA 180  
 CACTTGACAT ACTTATTTGC TCATTTCATA ATTGTAACAA CCCTATCAGA TAGGTACTAT 240  
 TTTTATCCCA CTTTACAGAG GAGAACTGA GGCACAGAAT TTTAAGTGAT TTGGCCGGGT 300  
 GCTCGAG 307

## (2) INFORMATION FOR SEQ ID NO:1205:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

GAATTCGGCC TTCATGGCCT AAAAAAAAAAT GTAGTCTAGA AAGAGACTAG GAATAGAACA 60  
 CTGCTGACTT GTTCTTATAC CAAGAGCTGG AGGCATAAAC AGTTTAAATA AAAAAAGAATA 120  
 CTTTGATCTT TTTGATGTAA CTTCCTTTA GAGATTCTGT TTCCCTGTC TAAATTGTGTC 180  
 AGGCTATTTC TGATTGCTGT TTAAATAATT GGTAGTTACT ATTTGAGTCA NGCTTCTTAA 240  
 AAAAAAAG ATATAAAAT TCGCCAGCTC AGCTTTCATT TAATTAGTAT CAAAGAAATG 300  
 ATATCTGTGG CAGTGAACAT TAGTAGCTTG TTCCAGGGTT TATTGTAGGT TTGTTCAAGT 360  
 CAGTACTGCC CATCTTGCA CTTAGGTTCT TGAATACAG AGGTGGATAA GGTTCGCC 420  
 TCGAG 425

## (2) INFORMATION FOR SEQ ID NO:1206:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

GAATTCGGCC TTCATGGCCT AAGACCAGCA CCATCGTGAG CAAGATTCTT GCTGCGCTGC 60  
 TTCCAAATG GAAAAGCATC ACAACTAAAT ACCTAATATC CTACCAAACA AACCACAGTC 120  
 CCTACGTAGC CCTACTTCAG TCCCAGGAGA AGGAATCCAT GAATGGGCTG AGGTTCCGAG 180

```

GGTAGGTTGT GGATGTCTTT CTCTAGAGGG GTCCACACACC TGGAAAAGAG GACACCCAGC 240
CCGNGGGATG AGGGAAGCTG GGCAAGGGAG AAAGTTGTTG AGTCACACTG GGGACCCAG 300
ATGTAGTGAG CTCAGCAAGA AAAGCCAGGT CCAGAGAGAG TCGCACAGAA TTCCTGACTC 360
ACAGCGCCCC TCGGTCCACA GTGGAGAGGA GGAGGAGGAG GAGCAGAAGG AGGGGGAGGA 420
GCTGCAGGAG GAGGAGGATT TGAAAGCGCT TTGGCCTTGT GTTATGTTTT GCTTCTTTTC 480
TGTGCCCCC TCTAGGCCAT GAAG 504

```

## (2) INFORMATION FOR SEQ ID NO:1207:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 242 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```

GAAATTTTTC AGTAACTCAG TGTCTTTAAC TAATAATTTA ATCATTCTAG TAAGAAAACA 60
TGCTTTGTAT GATTTTAGTC TTTACATTTA TTAATTTATG TAAATTAATA TGTGGGTTTT 120
ATGATCACCC ACGACATTGT CCTAACTTGT CGACTGTTCT GTGTGCTCTT TTAAAGAAGG 180
TAGTCTGTG GCCGGGTGCG GTGGCTTACG CCTATAATCC CAGCACTTCG GACAGGCTCG 240
AG 242

```

## (2) INFORMATION FOR SEQ ID NO:1208:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 152 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

```

GTAGAATTGT ACAGTGCTTA TGAGTTATGC ATGTGTTTCT GGTCTTTGTT CTAGGATTTT 60
TTTTTTTTTT TGATTGCTGC TCCAGTTGCC TTAATTACTT TGACATTGGA GTTGACCACA 120
TGATGGTGTT CCACACTTCC CCTAGGCTCG AG 152

```

## (2) INFORMATION FOR SEQ ID NO:1209:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

```

GAATTCGGCC TTCATGGCCT ACTACCCCTT TATCATTAC TAACGTGAAT GTGGTGCTAA 60
TTTTCCAGT CCATATCTTT GAACTTTTTG TAATATATGC ACATCAATAA GCAATCGAGT 120
TTTATCTATT CTAATTGTTT TAATGTACAA CTTTATGGGT ACATGTGCAA TTTTGTCTTCT 180
TGCATGGTGG CCAAATCAGG GCTTTTAGAA CATCCAACAT GCGAATAATG TACATTGTAC 240
CCATTAACTA ATTTCTCAAT ACTTCTGAGT CTTCCCTTGT TATGATTCCA CTCTCTACAT 300
CACATGTACA CCTCGAG 317

```

## (2) INFORMATION FOR SEQ ID NO:1210:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

```

GACAGATTTC ATTACCTTGA AGTTCCTGTC ACTGAACAAT TCTCACTCTG GATGTATTCC      60
TGCTCTAGGA TGTGAATTGA GACTTTTGTA ATAGAGTGGG CTTTGAGAAA TAGCTTTTCT      120
GCTCATTTTA GTTTCATGAT GACTGTCATG AATGTTTTCG TTCACGCTTA TGCATTGAGT      180
TTTATCAAGC ATTAAGCAGT TGGCCGAAAC AGGTAATACT TGAACATTCA GTCCAAGAAA      240
AACAAAATGG ATTTGAACAT ACGTAGAATC AGTAAACTCG AG                                     282

```

## (2) INFORMATION FOR SEQ ID NO:1211:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

```

GAATTCGGCC TTCATGGCCT AGTCAAACCC TAGAGCAATG CAGGCCTTGT TACAGATTCA      60
GCAGGGTTTA CAGACATTAG CAACGGAAGC CCCGGGCCTC ATCCCAGGGT TTAATCCTGG      120
CTTGGGGGCA TTAGGAAGCA CTGGAGGCTC TTCGGGAACT AATGGATCTA ACGCCACACC      180
TAGTGAAAAC ACAAGTCCCA CAGCAGGAAC CACTGAACCT GGACATCAGC AGTTTATTCA      240
GCAGATGCTT CAGGCTCTTG CTGGAGTAAA TCCTCAGCTA CAGAATCCAG AAGTCAGATT      300
TCAGCAACAA CTGGAACAAC TCAGTGCAAT GGGATTTTGT AACCGTGAAG CAAACTTGCA      360
AGCTCTAATA GCAACAGGAG GTGATATCAA TGCAGCTATT GAAAGGTTAC TGGGCTCCCA      420
GCCATCATAG CAGCATTCTT GTATCTTGAA AAAATGTAAT TTATTTTGA TAACGGCTCG      480
AG

```

## (2) INFORMATION FOR SEQ ID NO:1212:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

```

GAATTCGGCC TTCATGGCCT AGGGTGATAT TTAACCTGTT GCCAATGGCT AAGCTCCAGA      60
CTTTGCCTCT CACACTTGGA GGGATTCCCT GCCACCATAA ATCTCGAAT TTTCTAGAGC      120
ACCACATTGT TTCCAGTTA GGTAAGATCT CATTATTCCA GGTGAGCACA GCGTTTCCAA      180
TGCTTTCCTC GACTCTGCAT CTTTCTTCCA GCTGCTTCTT CCTTCGCTGG GCTTCTTTCA      240
GCTCTCGCTT TTTGGCCTGA ACCACCATT TTTTCACTG CTGTCTGTGC TTCTGAGCTT      300
CTTCAGCTGG TTTTGCTGGG AGATTGCTG GTCTGTCTCT GAG                                     343

```

## (2) INFORMATION FOR SEQ ID NO:1213:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 285 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

```

GAATTCGGCC TTCATGGCCT AGAGAACTA AAACCTCAGAG AAGTTAATTA CTGAACTCAA      60
GATCCCAAAG TGCTGGGATT GCAGGCGTGA GCCACCGCGC CTGGCTGAAA GAGCTTTTTT      120
AATGTATTAT TTATTGTGT CAGGATAGAC TCATTGATGC GTGTTTTATT CAGTGGGTTA      180
TAATTCTTTA TTATGTATTC TGATGTTGGT GTTTTCCCAG TTTTAGCCAA TGGCATCCCC      240
TTCCATCTGG ATCCTGTGTT CTTTGACAT GGCTCCAATC TCGAG                        285

```

## (2) INFORMATION FOR SEQ ID NO:1214:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 320 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

```

GAATTCGGCC TTCATGGCCT AGAACCAGGC CTTCCAGTAC GAGTTTGGAG CCATGTATGC      60
ATGGATGCTG TGTGTCTTCA CTGTCATCGT GGCCTACAGC ATCACTTGTC CCATCATCGC      120
GCCATTGGC CTCATCTACA TCCTGCTCAA GCACATGGTG GACCGGCACA ACCTCTACTT      180
CGTCTACCTC CCAGCCAAGC TGGAGAAGGG GATCCACTTT GCCGCTGTGA ACCAGGCCTT      240
GGCAGCCCCC ATCCTGTGCC TCTTCTGGCT CTACTTCTTT TCCTTCCTGC GCCTGGGTAT      300
GAAGGCCCCC GTCACCTCGAG                        320

```

## (2) INFORMATION FOR SEQ ID NO:1215:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 446 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

```

GAATTCGGCC TTCATTTTGA AAGATATTTT TGTAATAATC TGTTTGTITT CTTTAAATAC      60
TTTCCAGTGT TATCTGGGTT TCTTAATTTT TGACTTAAGG TCTGTAATAA TTTCTGCTTT      120
CATTCCTCTT AATATATTGT GTCTTTCTTT GTCTACATTT AAGATTTTAT CTTTATCAGC      180
TGTTTTGAAA AGTTTATTTT TGATGTGCTC TTTATGTTTT TCTTTATTTG TAGTGCTTGG      240
ACCTTGTTGG GCTTTTCTTA TTTATAATTT TCATCAAAAT TGGGGGGTTT GACCATTATT      300
GCTTCAAAAA TAATCTCTGT TCTCTTTCTT CACTTTCTCC AGTTACATAC TGTAAGAGTAA      360
ATGATAGCTA CCGAAGACAG AGTGATCCGT GATAAATATC ATTAATGCCT CTGAAGAGGA      420
GAATGACTCC AGTGAACCA CTCGAG                        446

```

## (2) INFORMATION FOR SEQ ID NO:1216:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 263 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

```
GGACTTTTGG GAGAAGCAGT ACTATTCATT AATTAAGTAT AGAGTGTCTT GTTAATCCTA      60
AAAGAAAGAG AGCCTTAATG AGGATCATGA ATTTTITTTT TTTTITTTT TTTTGGGATG      120
GAGTTTCGCT CTGTGCGCCT AGGCTGGAGT GGGGTGCTAT CTCTGCTCAC CACAACCTCA      180
GCTTCCTGGG TTCAAGCGAT TCTCTGCCT CTGTCTCCCG AGTAGCTGGG ATTACAGACA      240
TACGCCGCCA TGCCCAACTC GAG                                         263
```

(2) INFORMATION FOR SEQ ID NO:1217:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```
GAATTCGGCC TTCATGGCCT AAACAACAAC AATAACAACA AAAAAACAT GTATAACTGG      60
GAAAAAATG AAAGAGAATG CAGGATCATA AAAATATAGC AAACAAAGTG AGTGGGATTT      120
AAAATTAGTG GAATAAGAAA TAATGGGTAA CAATGAAGAA CATAATTTAG GTAATAGTAT      180
AGTATCTTGG GAGCCCTCCT GGAAGTATCT AGTTATGGAC AGTGAGCAGC AGAAACAGGA      240
TGTAACCTCA TTCAGCATACT TGATGGTTG TGGTAACCCT AGAAAATGAC TCCAGGAAAT      300
AGGTGAGAAT CCAATCTATC TCGAG                                         325
```

(2) INFORMATION FOR SEQ ID NO:1218:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 293 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```
GAATTCGGCC TTCATGGCCT ACAGAGATAG GGTCCCATCC AGGTTCCTAA CTGGGTGGCA      60
CATGCATGGG CTAGATCCAA ATAGCATTGC AAAGGCCTGG AAAACAGAAC TAGAATTGAA      120
ACCACCGCGG AAGACTCATT CGAAGTCGTG GGCTGAACTC AACCAGGTCA ATGCTTCAGA      180
AAAATACCAG CATTCTCCAC AGGACATAAA CAAGATTGTC TCATAACATA CCATTCAAAA      240
TATTAGGATA CAATCCAAAA TTGCTCATCA TAAGAAGACA GGAAAAACTC GAG                                         293
```

(2) INFORMATION FOR SEQ ID NO:1219:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACGAGGATTG | GGGTAGGTAT | GNGCTTNGG  | CTCATGTTG  | 60  |
| TGATGATAAC | TGAAGTCNT  | TGTGGGTCCG | ACCTGTTGTA | GGGTGTGGGG | GAAAGTGAAG | 120 |
| GAAGAGAATG | AAGGTGAGTC | CCCGCCGTG  | CAAACCTTCA | CCAAACCACG | CGGCCAGTT  | 180 |
| TTCGTGAGTA | CCCCTGTGTC | CCAGAGAGGA | GGACCCAGCG | TCCTCGGCTC | TGCCGCAGGC | 240 |
| CTTCTTGGTC | TGGTGGGTAC | TCGAG      |            |            |            | 265 |

(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

|            |            |             |            |            |            |     |
|------------|------------|-------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAGGAATTGA  | AACCCAGTAC | TTTCAGAAC  | TTCTTATGAC | 60  |
| TTCTGGAGTG | GTCCTCTGTG | AAGGGGTCAA  | ATGGTTGTCA | TTTCATAGCG | GTTACGACTT | 120 |
| TGGCTACTTA | ATCAAAATCC | TAACCAACTC  | TAAGTGCCT  | GAAGAAGAAC | TTGACTTCTT | 180 |
| TGAGATCCTT | CGATTGTTTT | TTCTGTGTCAT | TTATGATGTG | AAGTACCTCA | TGAAGAGCTG | 240 |
| CAAAAATCTC | AAAGGGGGAT | CTCGAG      |            |            |            | 266 |

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

|             |            |             |            |            |            |     |
|-------------|------------|-------------|------------|------------|------------|-----|
| GAATTCGGCC  | TTCATGGCCT | AGCTCATTCT  | GCTGGGGGTA | GAGATGAGGG | GAGGGAGTAA | 60  |
| GTTAAACCTT  | GGACTAGCAA | GTAGAAGCCT  | GGGGGGATGC | GTGTGCCTCA | GTTTCCTCCT | 120 |
| CCACAACCTGA | ATATAGTGGC | TGAAAACCTGG | GGAGATACTT | GATGGCGCGA | ATGTCCGTTT | 180 |
| TCTCTCCCTT  | CCCACCTCCT | GCAGGAAGCA  | GGACGGGGCA | GGCAGCACCT | GGTAGGCACA | 240 |
| GTGCTTTGCC  | CCTCCTCCCC | TTCCCTTCTG  | GAAGTCTTGG | GGCCTCAGTG | CTTGCAACAG | 300 |
| CCACTCCTCG  | AG         |             |            |            |            | 312 |

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

```

GCGATTGAAT TCTAGACCTG CTGGCCTCAA GTGAACCTCC CGCCTCGGCC TCCCAACGTG      60
CTGGTATTAC GGGCATGAGT CATTGTGCCC AGTCACAGAA TTCATTTTAT TTGTGAAAAAT      120
ACAGTGGTAC AAGTAGGCCT TTGTTAAATG ACTAACCTGA AACCTCTTGT GAATGACAAA      180
CTCCTCTCTA CTCCAAATAC TGGCCCATCC CTGCTTAAAT ACTGCTCAAT GAAGTTACTC      240
ATGCTAGTTC TTGAGGGAGT AACTCTAGAA TGATTCCATC TAGGAAGACA TAAGATAAAA      300
TGGTAAGTAT TCTAAGTTCT ATAGGTAGTT TAGTCATGCC ATATTATAAA CCTCCACTCC      360
AAAAATAGTG TGAGGTCATT TCTGGCCAGA GTGAAATAAA AAATGTATAA TGCCTGAACA      420
GTCTATTATT CTGACAATGA AAAAGATTAA TGCAGTTCCC TTATCACTT GCATGAGTAA      480
AAAAATATAT ATATATATTG GCTGGGCTCG AG                                     512

```

## (2) INFORMATION FOR SEQ ID NO:1223:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

```

GGGTGTTTCA TACAAAGAAT ACAAGTAACT GATGAATGAA GGGGGCATCT TGTGTCCCCA      60
CAATCCTGCT GTGCGCACAC CACAGGTGAG CCGTTCTGCC TAAGGGAACA GCCCCGGCCC      120
CTCCCTCCGG CTCCTCCCCA GCACCGTCTC CTCCACCCAG TGGCCTGGCC GTGGATGCTG      180
CCTGTGGCCC AGCTTTGAGA CACCGCCCTG ACACGTGTCC AGCCTTACGT GGAAGGATTT      240
GTCTGTTTTC TGGCATCCTA GTAGATGCCA CGTTAGTAGA TGCCATGTTA GTAGAAGGGA      300
TGTGGGCATT TCTTTGTAAG TTCCCAAAGG CCTATGAGGG TTTTTCAC GATTCCGTTT      360
CCAGTTTGGC TTTTGTGTT GTTGTGGCTG TTCTTGGCCC CCCTGGGCCC TGCAGTGGAG      420
TGGGGGGCTG CACCTGGGAG CCTCGAG                                     447

```

## (2) INFORMATION FOR SEQ ID NO:1224:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

```

GAATTCGGCC TTCATGGCCT ACTTTGTTTT ATATAATAAA GTATGCCTGT TATATTAAAT      60
AATAAGAATA TGGCAATTAG CGATATAGCA TACCCAAACA AAGATGTTCT CGATACAGTC      120
TGGCAAAGAC TATCCCAAGG TTATTTTAAT GAATTCAGAC ATTTTTCCT GTGGATATTT      180
CTCCATCCTA AAAAAAGTGG CAACCAAGGA AAATATTAG ATGCAAATAC TCGAG          235

```

## (2) INFORMATION FOR SEQ ID NO:1225:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 134 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACT GACGCCGCAC CATGACCCCTC CTGCTGCTGC      60
CCCTTCTGCT GGCCTCTCTG CTCGCGTCCT GTCCTGTAA CAAAGCCAAC AAGCACAAGC      120
CACCGCATCT CGAG                                     134

```

## (2) INFORMATION FOR SEQ ID NO:1226:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

```

GAATTCGGCC TTCATGGCCT ACACACATCT GGTAAGCAGA AGCAGGGAAG GCCTTTGTTT      60
CAGACAATCT TTAAATGAT GTTTGTATAG GGAACAGCTT TGGAGATAA AGAATGTCTC      120
TCTCTCTTAT GGTTTGAATG TGTCTCCAAC ACTTTATGTG TTGAGACTTC ATCCCCAGTG      180
TAACAGTATT GGGAAAGTGA GCCTTTAAGA GCTAATTAGG TCATGAGGAC AGCTCGCTCA      240
TGAGTTGACT AAAGCTGATA ATGTGGGAAC GTGTTGGTTA TCACAGGAGT GAGTTCCTGA      300
TAAAAAGAAT GAGTTTGGCC AGATTGTCTC TGTCTGTCTC ATCTGCCTGC TTCCACCTTC      360
TGTAATTCCA CCTGGAATGA CCCTCACCGG ATGCTGGTGC CATGCTCTTG GACTTCCCAG      420
CATCCAGAAC TTCTGTTTTT ATAAATTACC CAGTCTATGG CATTCTGTTA TAGCAGCAGA      480
AAATGGACAG AGACACCCTC AAATTAAAGG ACAGTCTTGC TGACTATGAA TTAGAAAATA      540
TCTGGGTTAG CTCGAG                                     556

```

## (2) INFORMATION FOR SEQ ID NO:1227:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AAATACTACC GTATGGCCCA CCATAATTAC      60
CCCCATACTC CTTACACTAT TCCTCATCAC CCAACTAAAA ATATTAAACA CAAACTACCA      120
CCTACTTCCC TCACCAAAGC CCATAAAAT AAAAAATTAT AACAAACCAC TCGAG          175

```

## (2) INFORMATION FOR SEQ ID NO:1228:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

```

GAATTCGGCC TTCATGGCCT ACTGTTTCTT TGCCCTTTTC ACCGTCTGGT GGTTCCTGTC      60

```

AGCCCTTGGC TTGTGGCCCT CTCATCCATC TTCCGAGCCT AGCACTCCAG TCTCTGCTTC 120  
 TGTCAACACA TCGCCTTCTC TTGAGAAAGA TCCCAGGCTG GTATTTAAAT TGCCTGTTGG 180  
 CAGGAACCTT GCCTGTCTTC CCTTACCCC ACAGCTCGAG 220

## (2) INFORMATION FOR SEQ ID NO:1229:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

GAATTCGGCC TTCATGGCCT AAGTCTCTTG ACATCTCAAT TTACCCAGAC ACATCTCTAT 60  
 TTATTATTC CCTGAGGAGG GGAAGTTGGG TATGGCGGTT GGAGGTGGAC AGGCTCCTAA 120  
 CAAGCACTTG CCAGCAGGGG GCACTCCCAG TTTTCGCTCC GCTGAGTCAC CCAACCCCTG 180  
 AGGCTTCGCC ACTTTCTAAT GTTGTCTGTG GCTACAATGG TCAGACCCAC AGGCAAAAAA 240  
 GTCGAAGTCC CTGGAGTCCC TGACCCCTCT TCCTCTCTAT AACGATTGGA AACTGTCCAA 300  
 ACCAACTCCA GTAGTCTCTG GCTGATGAAT CATCCTCTTG TGGGGCGGAG AGTGGGGGTA 360  
 GGGTGGAGCA ATGTGGGCTA GGACCCAGGG CAGGATCAAA ATCTCTGAAG ATGCAGAGCT 420  
 CCCTCTGCCC TGGGAAGAAG GAAGCAGGAT TTATTATAAC ATTTAGCTCA CTGTCCAATC 480  
 GACTAAACA AGCTCTCCCA GGGCTCGGGC CAACTGTCGA CTCGAG 526

## (2) INFORMATION FOR SEQ ID NO:1230:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

GAATTCGGCC TTCATGGCCT ACCATTGGGC TATGACCTGA GGAGAATCAA GGTAGCTTTC 60  
 TCAGGCCTCG TGGACATCGT GGATATAAGG AATGCTCTCG TAGGAGGGTA CAAGAACCCC 120  
 AGCATGATTC CAATAGAGAA GGCCCAGGGG CCCATCCTGC TCATNGTTGG TCAGGATGAC 180  
 CATACTGGA GAAGTGAGTT GTATGCCCAA ACAGTCTCTG AACGGTTACA GGCCCATGGA 240  
 AAGGAAAAAC CCCAGATCAT CTGTACCCT GGGACTGGGC ATTACATCGA GCCTCCTTAC 300  
 TTCCCCTCG AG 312

## (2) INFORMATION FOR SEQ ID NO:1231:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

GAATTCGGCC TTCATGGCCT AGCTTTATCC ACTCTGGAAT CCTGGAGGAG CCGCTACAAC 60  
 CAAGTTGTAA AAGAAAAGGG AGACCTTGAG NTGGAAATTA TTGTCTGAA TGACCGGGTA 120

ACAGATCTTG TAAACCAACA ACAAACCTG GAGGAGAAGA TCGGGAAGA CCGGGATAGC 180  
 CTGGTGGAGA GACTACACCG TCAGACTGCT GAGTATCCG CATCAAGCT GGAGAATGAG 240  
 AGGCTGAAGG CCAGCTTGC TCCAATGGAG GACAACTCA ACCAGGCACA CCTCGAG 297

## (2) INFORMATION FOR SEQ ID NO:1232:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

GAATTCGGCC TTCATGGCCT ACGCAGCTCT ACCTGCTCCA GGGGCACCTG GACCTGTGTG 60  
 AGCAGCACTG TGCCATCCTC CTGCAGACTG AGCAGAACCA TGAGACCGCT TCTGTGAAGT 120  
 GGAAACTTG AAGACATTCC TGCCTTCTT GAATTGGCCA AGAAGGTGTC TAGCCGGGTG 180  
 CCTTTGGAAC CAGGGTTCAT TACTGCAGA GGTATCTACT GCTGGCAGAT AGGGCAGCCC 240  
 AACGAAGCCT TAAAGTTCCT GAACAAGGCA CGCAAGGACA GCACCTGGGG CCAGAGCGCC 300  
 ATCTACCACA TGGTGAGAT CTGTCTGAAT CCAGACAACG AGGTTATGGT GCGGCTCGAG 360

## (2) INFORMATION FOR SEQ ID NO:1233:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

GAATTCGGCC TTCATGGCCT AGAAGGACTG AAATGATGTT ATACTAAGGG CTACTGAACT 60  
 TTTTGCCTGT TCTTCCAGG TGTGACAGCC TTTCTTTTC TTTCCAGGTG GTTCGCTTTG 120  
 AGGTGGTCTG AAGCCAAGGC CTCGCGGAGC TTCTTTGTGT GTCACCTTGC TTCCACGTTT 180  
 CAGTTCTGT TTTGTTTCTA CTGCTTTAGT TTTTTTAAA GTTCTCCAGT GTCCCAAGA 240  
 GGTATTAGAA TCTTGCTGTA CCCAAGCAAG ACGTTAATT TTCTTTAAC TGTTTGGGG 300  
 AGGGAGGGAG TGATAGCTTA ACTGCTGAAG CCAGGCGGGG GTCTGCTGGA GGATTCCAAC 360  
 AGAGAGTATT TCCTCCACTG TACAATGTCA CAGACTATCT CTATCATCAT TGCTTTGTGG 420  
 CAT 423

## (2) INFORMATION FOR SEQ ID NO:1234:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

GAATTCGGCC TTCATGGCCT AGCATGTAAA ACTTCAGTCC TGAACATTTA TAGGGTTTAA 60  
 TAGAAGGGCA TCCTCCAGGG CTGGTCCATT CAGAGAAATG CTGCATGCTG CCGTCATGGA 120  
 ATGTGGCCCA CAGGACACCA GAGCCGTGAG AACCAGGAGAG CAGACTTCCC TCACGGCTGG 180

```

GCTGAGCAAA CCCTCCAAAG CCCTCCTCAC GCAGTTACTA ACAATAGCAT GGGCTTACAG      240
CACAAGCACG TGTTCCTCACC TTTTTCCTAT GCCCTGGACT AAGGTTTGGC CAGTGTAATC      300
ATATAAGGCC ATCCTGACAT TGTTCCTGTG TTTCAAAATT TGGATTTTTA TTACATTAG      360
AACTACATTG CTCCTAGTAG AACATTACCT TTAGGGGACT AATTTTCCAT GGAGAACTAT      420
TTCAGCATAT TGCATGCTGC TCAGACCCCA AGTCAGATAT GCCCACAAGC TCGAG          475

```

## (2) INFORMATION FOR SEQ ID NO:1235:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

```

GTTTGGAGCC TAGTAGCACT ACCTTCCAAG TGAGTCACAA CAAATTTGAT CCTATTGGT      60
ATGTTTTTGT CCACTGTTAT GATTNATCAT GTATCTTACA AGAGCCACTC AAGCAAGACT      120
CTGCTTCTAT GTATGGTGAG GCCTNGTTGT TCTAGGCTAG AATAAACTCT TTGTATGCCT      180
CATTGAATAT GCCAGGTAAA ATTTATGCAG TCAAGAATGA ATTATTTTTC TGACTAAAGT      240
GTGTAGCAGT AGTTCAAAAT TGTGCCCTTG TTTAACAGT TTCTGTCNAC ACCTTCTCGA      300
G                                          301

```

## (2) INFORMATION FOR SEQ ID NO:1236:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

```

GAATTCGGCC TTCATGGCCT AAGAGAAGAT AACATTTACA AGTAAACAGT AAGTGCAATT      60
GTATTTTAAT TTCTTGGTCT CCGAAAACCT AGCTGTGACT GCTTCCATT AACAGTTCCA      120
GCTCTATGTG TTTCTCTTAA CGCTAAAGGC ACAGCCCCCG GGAATCTACT GCTTCCTAAG      180
AGTCTCCATG GAGTCTATTT TACAACCTCC TTTCCCTCCA TGCTTCCGCG GAGGAGTCTA      240
TACTATCTCT ATATACACAT TTAAACATT ATTCTTCATT TGAAATTCTT TCAATAAAAA      300
CACAGTCACC ATTCTTCATC TTCTTGGGAA ATGGCCTGCT CTCGAG          346

```

## (2) INFORMATION FOR SEQ ID NO:1237:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

```

GAATTCGGCC TTCATGGCCT ACTCACTATG TTGCTCAGGC GGATGTGGAA CTCCTGGGCT      60
CAAGCGATTG TCCTGCCTTG GCCCCCAAAG TGCTGGGATT ACAGGTGTGA GTCATGGCAG      120
CCACGGCTCC AGAGCTCGGG TTCTTAATCT GGTCTGTGGA TGGCCCTGGG GGGCGGTCCC      180

```

ATGAGCCCCT CACAATTGGA CACAGTTTTC CAAAGGGGTA AAAGGACAAG AATCGGTAGC 240  
 TGTGACTGTG GATGAGCCTC TGAGCTTCAC TTCCCTCCC TGAAAGGGGG TGACAGTGGC 300  
 ACCTCCCTGG AGGTTTTTCG GGAGGGGAGG AAACACATGT AAAATACTTC ACCCC 355

## (2) INFORMATION FOR SEQ ID NO:1238:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

GAATTCGGCC AAAGAGGCCT ACTAGACCTG ATCACCACGT TCAAAAGTTG GCTTCTCCA 60  
 TTTTAAGTTC TTCCTTAAAG CCTCTTAAAG CAAAGTCCCT GAAATGATAC AGTAGAAAAA 120  
 TCACACAGAC TTATTAAAAA TGAATTCTAT CACTATTCTT GAGATCTCGC CTGCCCCACT 180  
 GAGGACATTT TGTTTTCGCA AAGTGCTTTG AAATGTGATA AAGGATCTTA AAGAATATTT 240  
 GTAAAATTAT GCCCAAGAA GACATTCTTT GAGGTTAACT TGCAGTGTCT AAAAGTCAAG 300  
 AATGAGGAAG GAAAGGAAAA TAACAGATTG ACTTTAAAAA GGACCACGCT AATTGGGCAG 360  
 TGAACATCC TTGTGTCACA CCATTACCG TAGCAGACCA GAAGAGGGAA AAGGCTTGAT 420  
 TTTTCTCTCA TAGATACCAC AGTTCACCTT CAAAAACATT CCTAAAAATG ATTGATATTT 480  
 CTCTGATAGA GCACCTGTTT TGCTACTGAC AGTGTTAAGT TCCATACTAA TCAGCTCATC 540  
 TAGCCTAACG ACAACTCGAG 560

## (2) INFORMATION FOR SEQ ID NO:1239:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 569 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGNC AAAGAGGCCT AAGGAGAANG AGGCTCAGAA GGAGACGATT AAGGATCTTC 60  
 CCAAGATGAA CCAGGAGCAG TTCATTGAGC TGTGCAAGAC GCTTTACAAC ATGTTTCAGTG 120  
 ANGACCCCAT GGAGCAGGAC CTGTACCACG CCATCGCCAC CGTGGCCAGC CTCCTGCTCC 180  
 GCATCGGAGA GGTGGGGAAG AAGTTCTCAG CCGCACAGG CAGGAAGCCC AGGGACTGTG 240  
 CCACTGAGGA GGACGAGCCA CCAGCACCCG AACTGCATCA GGACGCAGCC AGGGAGCTTC 300  
 AGCCCCCAGC TGCAGGAGAC CCCCAGCCA AAGCAGGCGG AGACACACAC CTCGGAACAG 360  
 CCCCACAGGA GAGCCAGGTG GTGGTGGAGG GGGGCAGCGG CGAGGGACAG GGCTCACCTC 420  
 CCCAGCTGCT GTCTGACGAT GAAACCAAAG ACGACATGTC CATGTCCTCC TACTCGGTGG 480  
 TCAGCACGGG CTCCCTGCAA TGTGAAGACC TTGCAGACGA CACGGTGCTG GTGGGCGGGG 540  
 AGGCCTGCAG CCCCACAGCG CGACTCGAG 569

## (2) INFORMATION FOR SEQ ID NO:1240:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGAGACCAGC | CTGGCCAATA | CGGTGAAACC | CTGTCGCTAC | 60  |
| TAAAAATACA | AAAATTAGCC | AGGCATGGTG | GCTCACACCT | GCAGTCCTAG | CTACTTGGGA | 120 |
| GGGTGAGGCA | GGAGAATCAC | TGAAGCTTGG | GAGGCAGAGG | TTGCAGTGAG | CCAAGATTCC | 180 |
| ACCGCTTCCC | TCCAGCCTGG | ATGACAGAGT | GAGACTCCGT | CTCAAAAAA  | CAAAAAAAA  | 240 |
| GTTACTTCAA | TAATGTACTT | TTTTTTTCA  | AATTACAGAT | AATCTATAAG | GAATTAATCT | 300 |
| TGAAATTAAT | TCCAGGTTTA | ATTGTTAATG | AAATTCACA  | AGCCTAATTT | AACACTTGTC | 360 |
| TGGATAACTC | ATTTTGATAC | TGAGTAAATA | GTCACCGGTC | TCGAG      |            | 405 |

## (2) INFORMATION FOR SEQ ID NO:1241:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGGGCTTTTG | TGAATAAATT | TTAAAAGAGA | CTACTGCCTG | 60  |
| TCCTTAAATT | CCTTTTTCTT | TTTATAAAAA | AAGAACTATT | AAAAATGATT | GACAAATTTT | 120 |
| GAGTTAAAAA | ATTGTTAAAA | CATTCTCTAT | ATTTAATTTT | AATTTTATAA | TAGATTACAG | 180 |
| GAAGATGCTT | ATGAAACAAA | TACATTTGTT | TCAGTACATG | TCTTTAAATG | ATAGACTTAT | 240 |
| AAGTATGTAA | ACAACTATAT | AATAAAAGGT | TTCCAAACGC | TGCCTGTAAG | AAATCAGGCA | 300 |
| AATTTTACCA | TAAGCAATAA | ACCATTCCAA | GCCTTCCAGA | CAGTCTCCAT | AGCCGCACCA | 360 |
| GCATGGCAAT | AAGCTTTAAC | CAAACGAAAA | CAAACAAACA | AAAGCACTTC | GCAATTTGTT | 420 |
| GCTGCAAAAC | AGGGAGAGAA | AAGAGTGTAC | AAACTTGATG | GAATCACAAC | AGTCAATATA | 480 |
| ATTAAAGGA  | CAATAAAGTC | AATAAGGTG  | ATGGTGTTTA | TTGTTTAAAA | AGTTAGGCCT | 540 |
| CT         |            |            |            |            |            | 542 |

## (2) INFORMATION FOR SEQ ID NO:1242:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACTGATACAA | TTGTTGACTT | TTCTTTTACT | ATGTGTAAGA | 60  |
| AATACCCCAA | ACATGAAAAG | ATTGTTTGA  | TCATATGCAT | GTATGTAGAA | TATTTTTCGA | 120 |
| GAGCAGAAAG | ATTATGTTAG | AAGTGTGATT | TTTATTTTCA | GAAGTCATAT | ACATGTAAGC | 180 |
| TACAATTTTG | AGTGCTTTAT | AAACACTTAA | GATATATATA | TAAATTTTAA | TTTCATAGCA | 240 |
| ACTTGTAATA | AATAAAATAC | TTGTTGAAAA | GCCTTTTTC  | ACATATCCCT | AAGCTAAGGG | 300 |
| AAGAGGAAGG | AATAACAAC  | CAGTGAAAAG | ATGGTCTCCA | GTTTCTGAAT | GAAAAAGCTA | 360 |
| CAACCTCGAG |            |            |            |            |            | 370 |

## (2) INFORMATION FOR SEQ ID NO:1243:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGCCTCATCA | CGGGCAGGGC | TCTGGCCCAT | AGTGGCTGGA | 60  |
| CAGACACTGG | CACAGTCTTG | CTGGTCTGCT | GGGAGCACAC | AGACATTGGC | ACAGACTTGC | 120 |
| TGGTCTCTTG | GAAGAGGGCA | AGACCCCAA  | CCAGAGCAAA | ATACACTTCC | AGCTCTTAAC | 180 |
| CAGGCTCCTT | CCAGTCACAA | GTGTGCAGAA | TCAGAACAGA | AGTAGTACCA | ATCAATGTCA | 240 |
| CATGAACAAA | CAAGCTGCCC | CCAGGGTACC | ATTGGGGAG  | GGGAAATCTT | TTCTTCTTT  | 300 |
| CCCCCTTAA  | AAAAACACA  | TCTGCCCGA  | ACACTTTCCT | ACTGTTATTC | TTTCTCATA  | 360 |
| CCCCAACGCT | CGAG       |            |            |            |            | 374 |

(2) INFORMATION FOR SEQ ID NO:1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT  | ACACACCAA  | CTGATTATCC | ACCAGACACT | CAGCGTCTTA | 60  |
| GAAGATATTG | TGGAGAATAT  | CTCGGGGGAG | TCCACCAAGT | CTCGACAGAT | TTGCTACCAG | 120 |
| TCGCTGCAGG | AATCTGTTC   | GGTCTCCCTG | GCCCTCTTTC | CAGCTTTTAT | CCATCAGTCA | 180 |
| GATGTGACTG | ATGAGATGCT  | GAGCTTCTTC | CTCACTCTGT | TTGAGGGCCT | TAGAGTACAG | 240 |
| ATGGGTGTGC | CTTTCACCTGA | GCAATCATA  | CAGACTTTC  | TCAACATGTT | TACCAGAGAG | 300 |
| CAGTTAGCCG | AGAGCATCCT  | CCACGAGGGC | AGCACAGGCT | GCCGGGTGGT | GGAGAAGTTT | 360 |
| CTGAAGATCC | TGCAGGTGGT  | GGTCCAGGAG | CCAGGCCAGG | TGTTCAAGCC | CTTCCTCCCC | 420 |
| AGCATCATCG | CCCTGTGCAT  | GGAGCAAGTG | TATCCCATTT | CGCTCGAG   |            | 468 |

(2) INFORMATION FOR SEQ ID NO:1245:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AAGCTTATGG | GGAGGACACA | TATTTACTCA  | AACATCCTGG | 60  |
| CAATTCATAT | CTAGGGCACT | CCCTCTGTGT | GTCAGACGCC | CTTGACATGTG | TCAAATGTCA | 120 |
| TCTGATAACA | TTGATGAAA  | ATATCATTCA | CTTCTTCTTG | GTGCAGAAGG  | CATAGACCGG | 180 |
| ATTATGCAAT | CACTGAGAAG | TAGCTTCTGG | ATGTGTTTTC | TGGTGGCGTC  | TTAACAATTT | 240 |
| CAGCCGACTG | AAGGCTCTTG | GACACTTGGA | ACATTTGTAG | GGTTTCTCTC  | CGGAGTGGAT | 300 |
| GCGCTGGTGC | TCCTTCAGGC | TCCCCCTGTA | GGTGAAACT  | TTCTTGCACT  | CTTTACATT  | 360 |
| GAAGGGCTTC | TCCCCCTGTG | TGGCTTCTCT | TGTGACACTT | CAAGTAGGAC  | TTCTGGGTGA | 420 |
| ACTGCTTAGG | CCTCTTTGGC | CGAG       |            |             |            | 444 |

(2) INFORMATION FOR SEQ ID NO:1246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

```
GAATTCGGCC AAAGAGGCCT AGTATTTTGT ACTAGTTTTT TAATAATTAT AAGTCTTACA      60
CGTTCTCTAA TTCTTCTTGA ATCTGTTTAA TTTTCTCCC TTGGGAATTG TTAAGTGATC      120
ATGTATTGTG ATAACGCTA TAATTTTGCT TTTATTGATT TTTTGTGCTT TATATCTGCT      180
ACAATTTGGT TCCTCCAAAT CCCATGTTGA AATCTGATCC CCAGTGTTGC TGGGGGATCT      240
AATAGCAGGT GTTTGGGTCA TGGGAACAGG TCCCTCATGA ATGAATTAAT GCCCTCACTG      300
GGAGGAGGGG ATAAGTAAGC TCTCACTCAT TTAGTTCCCA AGACAGCTGG TTGTTTAAAA      360
GAGCCTAGTG CCACTTCTCT CTGCTTCTT TTCTTGCCGT GTGATCTCTG CACATGCCAG      420
CTCCCTCGA G                                     431
```

(2) INFORMATION FOR SEQ ID NO:1247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

```
GAATTCGGCC AAAGAGGCCT ATTTT TTTT TTTT TTTT TCNGGGTGTA      60
GAACATTAT TTATTTTCC CACAAATCAC TGAAAGTTA GGTCAGTGGG AAATAATTTT      120
AATCAAATAA TTGTACATAT TCTTCCACA TATCCTGCCT TGTATTAGGA AATGACATTG      180
TGATCCATTT CATTACAAGT AAAATATTAC AAAATATTTA CAGGAAAATA TAAAAAATAA      240
CTCAACACA AAAGGCAAGA TGAAATAAAC TGTTTTTTT TCTCCAGAAA TCTCTACTCC      300
AGTGCCACA GCACACAAGA GTCAAAACAA ATAAGCAACT AAGATCCCCC GATCACAAAT      360
TTCAAAGAA CTAGGCCTCT TTGGCCGAA                                     389
```

(2) INFORMATION FOR SEQ ID NO:1248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

```
GAATTCGGCC AAAGAGGCCT AAAGGAAGGC CACTTCTCAA CTGGCAGAAC TTCTGAAGTT      60
TAGAATTGGA ATTACTTCCT TACTAGTGTC TTTTGGCTTA AATTTTGTCT TTTGAAGTTG      120
AATGCTTAAT CCCGGGAAAG AGGAACAGGA GTGCCAGACT CCTGGTCTTT CCAGTTTAGA      180
AAAGGCTCTG TGCCAAGGAG GGACCACAGG AGCTGGGACC TGCCTGCCCC TGCTTTTCC      240
CCTTGGTTT GTGTTACAAG AGTTGTTGGA GACAGTTTCA GATGATTATT TAATTTGTAA      300
ATATTGTACA AATTTTAATA GCTTAAATTG TATATACAGC CAAATAAAAA CTTGCATTAA      360
CTTAGGCCTC TTGGCCGAA                                     380
```

(2) INFORMATION FOR SEQ ID NO:1249:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

```

GAATTCGGCC AAAGAGGCCT GTTGGTTTG TGA TAGACT TAAAAATACT AAAATAAGCC      60
AAATAGATGC TAACAATACT AATTGACACA CAAGATTGTA AAAAAAGTACT TCAAGTTTAA      120
TCTCTTATCC CTAGAGAAAG TAAATAAAAA GTGGCTCTTG CAAAAATAAA TGAAAACAAA      180
ACCACCAACA AAAACTAATC ATATAAGATA CTGTTTTTCT TTTTGAATAC TTCAATTGGT      240
CCTATATTAG GATAAGGTTT TGATAGCAAG GACTTCCTAG CTTCTCCTT TATCTTCCAT      300
TCTCTAGTCA CTTCCGTGTT TTTATCAAAC AAGGCTACGT GTAGGCTTTC CTACAAAGTC      360
AGATTGAATT CTACCACCCT CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1250:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

```

GAATTCGGCC AAAGAGGCCT AACCATGTCT GACCAGATCA TTGGGAGAAT TGATGATATG      60
AGTAGTCGCA TTGATGATCT GGAAAAGAAT ATCGCGGACC TCATGACACA GGCTGGGGTG      120
GAAGAACTGG AAAGTGAAAA CAAGATACCT GCCACGCAAA AGAGTTGAAG GTTGCTAATA      180
ATTTATACTG GAATCTGGCA TTTTCCAAG CCAAGAGAAG ATCGAATGGC TTTTTCGAGC      240
TAACTACTAT GTGTAGACAG GTTTTATATT ATAAAGTATG CATTCTTATC ACCTAGTATA      300
TAGTTAGTTT GTAGAGTGAT TTCCCCCAG TTTCTTGAAC ATGGTATCTT CACATCTTGG      360
ACCTTGGTCA GTTGTGCTAT TCATTATTAA ACACTAAAAC TTTGGCGGTT TAGGCCTCTT      420
TGGCCGAA

```

## (2) INFORMATION FOR SEQ ID NO:1251:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

```

GAATTCGGCC AAAGAGGCCT AAGAAAAGTA GTATGAATGA GTTTTTCTAC ATATTA ACTA      60
CAATTTATGG TAATTTGTGA AATGTTTTTC CATTTTAA TGTAAGAGTC TCTATCTCCA      120
CTCACAAGC AACAGGCACT GCTAGGGGTC TTAGGCTAAC ATCTGCCACC CCACCACTCT      180
GCATGGCCCA TAAACAGGTG CAGAGGACCA GAGTTCACCT GTCAGCAGCA CCGCAGAATC      240
CAACTCTAGG CCTCTTTGGC CGAA

```

## (2) INFORMATION FOR SEQ ID NO:1252:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 436 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

```
GAATTCGGCC AAAGAGGCCT ACTTTTTTTT TAATTTTCCA CTTTCTTCTT AACTTTACTT      60
CTCTTTTTGT CCCCCCCCCT CTTACAGAAG TTGAGGCCAA GGGAGAATGG TAGGCACAGA      120
AGAAACATGG CAAACTGCTC GTGCTTTCA AACCAAAGTG TTCCCCCAA CCCCAAATTT      180
GTCTAAGCAC TGGCCAGTCT GTTGTGGGCA TTGTTTCTA CAACCAAATC TGGGTTTTTT      240
TCTTCTTTCT TTAAACATAG AGGTACCACC ACAAGGGATG CCCTACTCTC TCGCAGCTCT      300
TGAAAGCATC TGTTTGAGGG AAAGTCTCTT GGGCAAGCAA GTGGTTATTT GGATTGCTTG      360
CTTCCCTTTT TCCACCTGGG ACATTGCAAT CATAAAATAA CAGTAAATTC CAAACCTCTA      420
GGCCTCTTTG GCCGAA                                     436
```

(2) INFORMATION FOR SEQ ID NO:1253:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 399 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

```
GAATTCGGCC AAAGAGGCCT AGGGTAGATC ACTTGATATC AGGAGTCGAG GCGGGAAGAT      60
CACTTGACGT CAGGAGTTCG AGACTGGCCC GGCCAACATG GTGAAACCGC ATCTCCACTA      120
AAAATACAAA AATTAGCCTG GTGTGGTGGT GGGCACCTGT AATCCCAAGT ACTTGGGAGG      180
CTAAGGCAGG AGAATTTCTT GAACCCAGGA GGCAGAGGTT GCAGTGACCA GCAAGGTTGC      240
GCCATTGCAC CCCAGCCTGG GCGATAAGAG TGAAAACCTC ATCTCAAAAA AAAAAAAAAA      300
AAATTCCTTT GGGAAAGCCT TCTACATAAA AATCTTCAAC ATGAGACTGG AAAAAAGGCT      360
ATGGGATCAT CACCGGACCT TTGGCTTTTA CAGCTCGAG                                     399
```

(2) INFORMATION FOR SEQ ID NO:1254:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 444 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

```
GAATTCGGCC AAAGAGGCCT ACCCGTACT TACTTCTCAA TCCTAAAGAG AGAAAACAGG      60
TGTTTGATCA GTATGTAAAG ACCAGGCGAG AGGAAGAACG CAGGGAAAAAG AAAAATAAAA      120
ATGCAAGCCA AGGAAGATT CAAAAAATG ATGGAAGAAG CAAAATTTAA TCCAAGAGCA      180
ACTTTTAGTG AATTTCAGC CAAGCATGCT AAAGATTCAA GATTCAAAGC AATTGAAAAG      240
ATGAAAGACC GAGAAGCCTT GTTTAATGAG TTTGTGGCCG CTGCTAGGAA GAAAGAGAAA      300
GAAGATTCGA AGACCAGAGG TGAGAAGGTA AGATGGTTTT AGTCCAGTG GTGTGATTGA      360
TGGGAGTGTG AATGGGAAAG GTCTATGCTG GTGTTATGTT TCTAACCTTA TTCATTGGCA      420
TAAATAATAG GACGTACACT CGAG                                     444
```

## (2) INFORMATION FOR SEQ ID NO:1255:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 284 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

```
GAATTCGGCC TTCATGGCCT AAGAAGGACT ACCCTGCACT GCTTTCCTTG GATGAGAATG      60
AACTCGAAGA GCAGTTTGTG AAAGGACACG GTCCAGGGGG CCAGGCAACC AACAAAACCA      120
GCAACTGCGT GGTGNTGAAG CACATCCCCT CAGGCATCGT TGTAAAGTGC CATCAGACAA      180
GATCAGTTGA TCAGAACAGA AAGCTAGCTC GGAAAATCCT ACAAGAGAAA GTAGATGTTT      240
TCTACAATGG TGAACACAGT CCTGTTCACA AAGACAAACT CGAG                        284
```

## (2) INFORMATION FOR SEQ ID NO:1256:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 691 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

```
GAATTCGGCC TTCATGGCCT AGTGGGAGTT TGCTAATGTG AAACCTAATG ATGTCTGAAA      60
ATGGTCCTGA TGGGTATTAA TAGCCATCTG GAAAAATTTT ACATCTTCAC AAATAATCCC      120
AATAATTTAT ATGTGAAGA TATTATCCTG ATAGTCCTTC TTTTCCTATA TTCTTGTCGG      180
CTGTAGGATG AGAGCAGTAT GAAGCAAACA GAAGACATTT TGAAATTAAT CACAAAATTC      240
CCATTGCTTT GAAGCCTGCT ATTATTATAC TAAGCCTTCT TATAGCTTTA AAAATCAAAC      300
AATGCCAAAC AGTATATCTA ACATTTTAA TTTCTTTTGA GCCAAACCAA TTTGGTTTAA      360
ATTTCTCTGC CTCCGTGAAG ACAAGCTGGG CTGGGGAGGA CGGTGTCTAG GAGGGATGAC      420
CCCACTCAGC TCCAGGCAGT GTTCTGCCGA GACCCCAAGA ACTCGGGGTG TCAGAGGGCA      480
AAGGAACTAC CTGCCTTTCA CGGCTGCTGA CTTCTCAGGG CTGCAAGCAG CACAGAATGT      540
TATCCTTACG TCCTGAGCCG GTTTAAGTCT GTGGAAAAGG AAGCACGGGA GAAATCCACG      600
TAACCTTTGC TTTCTTTTAA AGGGAAGCGG TTCCGCCGTG AACTTGGAAC CCTCAGCTCC      660
GGGTGTTCTC GGCAGAAGGG CAGCTCTCGA G                                691
```

## (2) INFORMATION FOR SEQ ID NO:1257:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 383 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

```
GAATTCGGCC TTCATGGCCT AAGCTGATCC ACGATCAGAG TGCTCCCAAGC TGCCCCAGCA      60
GCTCCCCGTC CCCAGGGGAG GAGCTGAGG GGAAGGGGA GACAGATCCG GAGAAGGTGC      120
ATCTCACCTG GACCAAGGAC AAGTCGGTGG CAGAGAAGAA TAAGGGCCCC AGTCCTGTCT      180
CCTCTGAGGG CATCAAGGAC TTCTTCAGCA TGAAGCCGGA GTGGGAGAAC TTGAACCACT      240
```

CCAACGTGCG GCGCATGCAC ACGGCCGTGC GGCTGAACGA GGTTCATCGTG AAGAAATCCC 300  
 GGGACGCCAA GCTTGTTTTG CTCAACATGC CTGGGCCTCC CCGCAACCGC AATGGTGATG 360  
 AAAACTACAT GGAGTTTCTC GAG 383

## (2) INFORMATION FOR SEQ ID NO:1258:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 418 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

GAATTCTGAG GGAATAACTA CGACCATGAG ATTGGCAGTG ATTGCTTTT GCCTATTGG 60  
 CATTGCCTCC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT 120  
 TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA 180  
 GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA 240  
 AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCATG GACGACGATG ATGACGATGA 300  
 TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA 360  
 ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAG CAGTCGAG 418

## (2) INFORMATION FOR SEQ ID NO:1259:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 189 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

AAAAATTAA TAATGCTTGA CTTTTTTTTT TTTTTTCTC TTTTGAGGC AGGTTCTTGC 60  
 TCTGTCACCC AGGCTGGACT GCAACAGCAT GATCTTGGCT CACCTCCGCC TCCCAGGCTC 120  
 TGGCAATCCT CCCACCTCAG CCTTCAGAGT GGCAGAGACT ACAGGCTCAT ACCACCGCAC 180  
 CCACTCGAG 189

## (2) INFORMATION FOR SEQ ID NO:1260:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 278 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GCGATTGAAT TCTAGCCTTT CCTCCGTTCA AGTAAATTA GAAATTCCT AAGTTTCTT 60  
 TATAACAGGT AGCCTAAATC TATATCATAC TTTTAAATA AAAATCTAGG TGCAAATTTG 120  
 TTCTTATGGT TAAGGTTAAC ATGTACACTT CACAAACATT GAGACTTTTG TTTGTGTTTC 180  
 TGGGACAAGG TCTTGTTCTG TCTCCAGCT GGAGTGGATA CAAGCATGGC TTGCTTCAGC 240  
 CTC AACCTCC CGGACTCAAG CGATCCCCC CCTCGAG 278

## (2) INFORMATION FOR SEQ ID NO:1261:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 265 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

```

GAATTCGGCC TTCATGGCCT ACTCACTGGA TGCTGGGGGA GGGCCCCCTCA GGTGAGCAGC      60
CCACCACTGA CTTCAGCGTT GCTGGCTCGG TTATCAGACT CTCATCCAAC ACAAGCTCAC      120
AGGGAAAGCC GTTCCTTGCT CCTTGTGGAG GGAGCTACCG TCATTGCCCT GAGACCACCA      180
GCCAAGAAAG TAGGTATGTC CAGGTAGGGA ATTCAGAGGG ACCCAGTGCA TCCAATTATA      240
CAATTATACC CAGAAAGTCC TCGAG                                     265

```

## (2) INFORMATION FOR SEQ ID NO:1262:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 426 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

```

GGTCAGTATT GAAGGTTGTT TTCTGAGCCA TTGTATGAAG CTGCTGTTTT GCGTCCCTA      60
ATGCAGGGTG AGATGGTAGT GTGATTCTTG TTGTGACATC TCGTGACTGG GCAGGACGCT      120
GAATACTGAT TGCTGCAGAT GGAGGATGCT GGATAGACAA GGTGGCCCTA CTAAGTGCTG      180
AATCAGTAGC ATGCGCCGCT GTCGTAGTGA TGACTGGAGA CTGAGCTCTG GTGGCTGAGA      240
CAGTTGCTAC CACAGCAGGA GGGATGGCAT TGGAGGTGGT CACAGGTGGC CGAGACTGGA      300
TTGGTTGGTG AATGATGTGC TGTACTGCTG GCTGAGCAGT AGCAGCAATT GGCAGCTGTG      360
AGGTCGGCCT CAGGACTGTG GTTACTTTAG AACTGGACAT CACAGCAGCA GCAGCTGCAC      420
CTCGAG                                     426

```

## (2) INFORMATION FOR SEQ ID NO:1263:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 398 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

```

GAATTCGGCC TTCATGGCCT AGGCCGGTGT TTATGCACGA TGGCGTTGAA AGCTAGTCCA      60
TCTCTCCAGC TGGTGGTGAA GTTGTGTACA TTGACGTTGG GATAACCTGC AGTCTTCATC      120
TGGCACCACA GAAGCAGGGC ATCCTTGGCT GACTTCTTCT CCTTGTGTGC TTCTGTCTCC      180
ACACTGATGT CTGGATCTG GAATCGAAGG ATGATGGTCC AGACCAGCCC AAGGGTCAGT      240
CGGTGGTTTC CGTCCACAAT GTCATGGGAG CCCATGTTTT CCAAGTGAC TTTCTGCTCC      300
TTGAGGAAGT GCAGTGCCTT GTCCACGTTT TCCAGGCAGT GGATCCGCAT GCGGCCCTTT      360
GTAGGCTTTG GCAGTATCTC TCCCGAGAGC ACCTCGAG                                     398

```

## (2) INFORMATION FOR SEQ ID NO:1264:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

```

GAATTCGGCC TTCATGGCCT AAAAAAGCT GTTAAGAAAA TATGTTTTAA AAATTTGCCC      60
AACAGGAAGG AGAAAATTAG AATCTAATAG CAAACTTGTG TCAAAGCAGG GGAGACCACA      120
TGATCTTCCT CTTTGAAAAT CTGTCTGGG TGATGACCAT ATGCTCTCTA AACAGGTTTT      180
CTGTGTTTTA GGGAAAGAAG CTCAGAAAG ACCCCTGCTC TTGATGACC TCCCTCCGGC      240
CAGCAGTAAC CTCGAG                                     256

```

## (2) INFORMATION FOR SEQ ID NO:1265:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

```

GAATTCGGCC TTCATGGCCT ACAGAGTCTA ATTAGCCATA TTTATATGAT AATAATAAAC      60
ATTTTGGCTA CAGTCCTACC TAGATTTTTT TTTTITAGAT GGAGTCTTGC TCTGTCGCCC      120
AGGCTAGAGT GCAGTGGTGC GATCTTGGCT CACTGCAACT TCTGCCTCCC AGGTTCAAGC      180
AACTCTGTTG CCTCAGCCTC CCAAGTAGCT GGGATTACAA GCGCACATGA CCACGCCTGG      240
CAGCTCGAG                                     249

```

## (2) INFORMATION FOR SEQ ID NO:1266:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

```

GAATTCGGCC TTCATGGCCT AGGTTATATA GCAGTGATGC TTTCATAGTA TTTTCTTGA      60
ATAAGGTCCC CAAAACCTTA TTAAGTTCCT GGTAGGCATG GAGCATTGAA GATGGCAGAC      120
ATGGTGCAGT CTCTCAAGGA GTTTACGCTC TAGTGGAGAA AACAATCAGA CAGCCTTAAA      180
ATACATGTAT GGCTACTATA ATAAATACTG TGAAGCAGGA GTGCACCACG AAACCTGGAG      240
TCCTCTCCAT CCTCCCCTTC TCGAG                                     265

```

## (2) INFORMATION FOR SEQ ID NO:1267:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

|             |            |            |            |            |            |     |
|-------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC  | TTCATGGCCT | ACTAGACCTG | CCTCGAGATT | AGGGGGGTTA | GACTCAGAAT | 60  |
| TCTGTCCAAA  | CTCCTGGACG | ACCTCTTGAA | ATTAAGTCAG | GGATTTTATG | TACTGGGTTA | 120 |
| ATTTCGTAAAC | CTCTGGGTAT | AATATTAGGT | TTGCATGTAG | AAAGGGTCTC | CAGTATAGGA | 180 |
| CTTCAAAGAA  | ACTAAGCCAT | AGACGTAATT | TAAGGGCTGT | TCTGATCTGA | AGAAGTGCCA | 240 |
| TGGGTAGAAG  | TTTtagccat | GGTAAAGAGG | CTTCCTGGCA | TCATTGCTC  | GAG        | 293 |

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 501 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TCATGGCCTA | CTGGTCCAAG | CTGATTACCC | TCATAGTGTC | CATCATTGAG | 60  |
| GAAGACAAGA | ATTCCTACAC | TCCCTGCCTC | AACCAGTTTC | CCCAGGAGCT | GAATGTGGGT | 120 |
| AAAATCAGCG | CTGAAGTGAT | GTGGAATCTG | TTTGCCCAAG | ACATGAAGTA | CGCCATGGAG | 180 |
| GAGCACGACA | AGCATCGTCT | ATGCAAGAGT | GCCGACTACA | TGAACCTCCA | CTTCAAGGTG | 240 |
| AAATGGCTCT | ACAATGAGTA | TGTGACGGAA | CTTCCCGCCT | TCAAGGACCG | CGTGCCTGAG | 300 |
| TACCCTGCAT | GGTTTGAACC | CTTCGTATC  | CAGTGGCTGG | ATGAGAATGA | GGAGGTGTCC | 360 |
| CGGGATTTC  | TGCACGGTGC | CCTGGAGCGA | GACAAGAAGG | ATGGGTTC   | GCAGACCTCA | 420 |
| GAGCATGCCC | TATTCTCCTG | CTCCGTGGTG | GATGTCTTCT | CCCAACTCAA | CCAGAGCTTT | 480 |
| GAAATCATCA | AGAAACTCGA | G          |            |            |            | 501 |

(2) INFORMATION FOR SEQ ID NO:1269:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGCCCTGTC | TCCACCTGGG | GGGACTGGGA | GTGTGAGTGT | 60  |
| GCATGGCATG | TGTGTGGCAC | AGATGGCTGG | GACGGGTGAC | AGTGTGAGTG | CATGTGTGCA | 120 |
| TGCATGTGTG | TATGTGTGTG | TGTGTGTGGC | ATGCGCTGAC | AAATGTGTCC | TTGATCCACA | 180 |
| CTGCTCCTGG | CAGAGTGAGT | AACCCAAAGG | CCCCTTCGGC | CTCCTTGTAG | CTGTTTTCTT | 240 |
| TCCTTTTGT  | GTTGGTTTTA | AAATACATTC | ACACACAAAT | ACAAATTGAC | AGGTCAAAT  | 300 |
| CCATGAAATG | AGATCCCCCA | GCGGCTCGAG |            |            |            | 330 |

(2) INFORMATION FOR SEQ ID NO:1270:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 502 base pairs  
(B) TYPE: nucleic acid

- (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

```
GAATTCGGCC TTCATGGCCT AAAAAAAAAA TACTGATTCA CTTTGCAAT TTTTCAGATA    60
CTACTTGATG TGACACCTCC CCTAGGCTTG CTGTGGGTCT CTTGGAAGAT AGAGCTATAT    120
TAACTCCTTG ACTTAAAGGG CAGCAGACTA TATAAGGTCT CTTACAGAC AGAGTAGGGA    180
GAATAATGAA AAACCTTTTG ATTTCTAGAG AGAAGAGAGA AGACATAGCA ATGGAACTGT    240
TCTTAGCTTT GTTTGCTACA ACTCTTCAA GTTTAATTTT AGATTCAGTG CATTATTCA    300
TAGAGCATGA AACATATAAT CATGCCTTTT ACTAATTGCG GATACTTAA ATTATATATT    360
TTTGACCTAC TGTGTTATGG TCAATTGAA AAAGAATGGT TTGATTATAT ATTATGTCT    420
GTAGATTCCC TGTACTATTC TAGGATCATA TGACATATTA TCATTACTAA ATATAGCACT    480
AATTATTGAT GCTCCGCTCG AG                                         502
```

(2) INFORMATION FOR SEQ ID NO:1271:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

```
GAATTCGGCC TTCATGGCCT ACCCCTGACT ATTCAGTAGG AGAAGAAATC AAAAATCCAT    60
TCTTTTCTCC TTCTCTCCCT CCAACAGTGG CCAGGGGAAG GGAAGTGAG GGCAGGGGCA    120
AAAAGATTGG GGAATTTTAA TTTATTTATT TATTGTGACT TTTCAATTTT TTGGTATTGG    180
GCTTTACTGG AATAGGAGGG CCCCTGCCCA CTGTGCCCGG TTTATCCCTT ATTCGCCAAA    240
CCCTGCTCTC CCCAACACCT ACTCACTTAA GCACTTGTC TCGAG                                         285
```

(2) INFORMATION FOR SEQ ID NO:1272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

```
GAATTCTAGA CCTGCCTCCA ATTTGAAGAT TTATTTCTCT CTTTGGATAT AGAACAAAAT    60
AACTTTATGT ACATTTTATT TCACTTTATT TTACTATTGG GTTGGTGCAA AACAAATTGC    120
AGTTTTCCCA TGAAAAGTAA TGGCAAAAAC TGCAATTACT TTCGCACCAG CCCAATATTT    180
TATTTTGAGA CAGAGTCGCA CTCTGTCACC AAGGCTGGAG TGCAGTGGTG TCATCCCAAC    240
TCACTACAGC CTCTGCCTCC TGGGTTGGAG AGATTCTTGT GCGTCAGCTT CATGTGTAAC    300
TGGAATTACA GGTGCACGCC ACCACGCCCA GCTAATTTT GTATTTTGTG TAGAGATGGG    360
GTTTCGCCAT GTTGCCCTGG CTGTTCTCAA ACTCCTGACC TCGAG                                         405
```

(2) INFORMATION FOR SEQ ID NO:1273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

|   |     |
|---|-----|
| CGGATTGAAT TCTAGACCTG GCTCGAGGCA GGTCTAGAAT TCAATCGGCT TCCTGGCAGT | 60  |
| GCCCTCTCCC AGATGAGACC TGATCTCTTT TTGTGTTTTT GTTTTTTGT TTGAGACAGA  | 120 |
| GTTTTGCTCT TCTTGCCAG GCTGCAGTGA GTTGAGATCG CACCACTGCA CTCCAGCCTG  | 180 |
| GGTGACAGAG TGAGACCCCA TCTCAAAAAA AAAAAAAAAA ATCTGGCCTT ATGGACTGTG | 240 |
| TACTACACTC TAGTGGGGGT AAGAGGCAAT GGGTAAATAG GTAAGTAGAT TATTGGATGT | 300 |
| ATTAGAAGGG GCATGGGGAA TGTGGGGTCA AGGTTATAGT TTAAATAGG GTGGTCAGGG  | 360 |
| AAAGCTTTCT GAGAAGGTGA CATTTGAAAC AAATACTTGA AGGAGTCTCG AG         | 412 |

(2) INFORMATION FOR SEQ ID NO:1274:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 285 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGCTATTTTT AAACAATATC TGAGATTATT CATTCAACTA | 60  |
| AACTTATTA AGCATTTAAT ATCTGTCTGG CATTCTTCAG GCACCAAGGA TATTTCGTTG  | 120 |
| AACAAAACAA AATCTTTGTC ACTATGGAGT TTACGTTTTG TGGTGGCATT GGAGTGAAGA | 180 |
| GCTAGGGAAT AAAAAACAA GTCAATATGT AGTATGCCAC TTGGTGGTAA GTCATTTGGA  | 240 |
| GAATGATGTA GTAGGGAAG AGGAAAAGGG TGTAGGCATC TCGAG                  | 285 |

(2) INFORMATION FOR SEQ ID NO:1275:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 280 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACTCCACACA TTCATCTCCC AAAGGACTCC TTGAATATTT | 60  |
| GCCCCAAAAC ATCAGTCTCC AGAAAACACC CCTCCAGTC ACACACACAC CCAAATTCCTC | 120 |
| CGATGTATTT TCATTTTTTT TCTCCTCTTC TCTTCTCTTT TTCCTTCCTT CCTTCTCTCT | 180 |
| TTTCTCTCTT TCCATCCCTC CCTTCCCTTC TCCCTCCCTT CCTTCCCTCC TCCCTTCCTT | 240 |
| CCTCCCTCCC TCCTTCCTT CCTCCCCCA CCCACTCGAG                         | 280 |

(2) INFORMATION FOR SEQ ID NO:1276:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 220 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACGAGTGGTG CGATTTTTTT TTCTTAGCTT ATCAGCTATG | 60  |
| GTTAGTGTTA GCGTATTTTA TGTGCGGCC AAGACAATTC TTCCTCTTCC AGTGTGGCCC  | 120 |
| AGGAAAGCCA AAAGATTGGA CACCCCTGGT AGAGGCAGAA ACTCACTGGG TTAGTTCAC  | 180 |
| AGCATCTGAT CAAAGATATG AGGCCAAAGA GCCTCTCGAG                       | 220 |

(2) INFORMATION FOR SEQ ID NO:1277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACGAGCTGAG ATTGCGCCAC TGCCTCCAG CCTAGGCAAT  | 60  |
| AGAGTAAGAC TCCATTTCAA AAAAAAAAAA AAATGTTGAT CAAAAGAAGC CAGATGACAG | 120 |
| AGTACTCACT GTGTGAGTCC ATTTATTTGA AATTCTAGAA CAAAAATAA ATATCCATTG  | 180 |
| ATAGAAATGG GAACAGTGTG GGCCTATGAA GAATGGAAAT TGAATGGAAG GAGGCCTCTG | 240 |
| CTCGAG  | 246 |

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGCTGGGCGT GATGGCGGGC GCCTGTAGTC CCAGCCACTC | 60  |
| GGGAGGCTGA GGCAGGAGAA TGCGGTGAAC CCGGAGGCG GAGCTTGAG TGAGCCAAGA   | 120 |
| TTGCGCCACT GCACTCCCGC CTGGGCCACA GAGAGAGACT CCATCTCNAA AAAAAAAAAA | 180 |
| GAAAGAAAAA AAGAAAATAA ACAAAGAAAA AATTAAGATT TTTGAAATAA AAACAAATAT | 240 |
| TAAAAATTAT TGAAATATAT TGAAAGTTTT TTCACCATAT ATATTACCT TTTAAAAGGA  | 300 |
| TATGAATTCA ATTATTTTAT TTGCTTATGG AAAATAGATC CACTGCTCTA AGATGCTACT | 360 |
| AATCATGCTC AGAGGATTCA CAACAAACAG ACTGATAAGG TATTACTTAA AGCGCTCTAC | 420 |
| ATTAAATAGA GCATTCCAGT TTTCTAGGGC AACTACTTGT CTGTATTTC AAGGTCAAGC  | 480 |
| AAAATAGCTT TCGTTCGAG  | 499 |

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

```

GAATTCGGCC TTCATGGCCT AATGAGCTAA AAGCAGTGTC ATCTCCGCAT GTTGGAGCAG      60
CCAAGAAATA GTTTGGTACT ACCGACATTG TCTAATCCAT GTCACATCCT CATACAATTT      120
AATTGCTCAA CCATGCATTT AAAACTCCTC AAGAAAGGAT TGGTACTGCA ACTGTAGGTA      180
AACTGAAAAA AAATAAGAAA GAAAGAGTTG GATGAAAATG TGAAAGCCCA AGTTTAGATG      240
TGCATTAAAGT ATTAAATAGC ACAGTATCTT CTTCATGGAG CCTTTTTTCC TCCCCCATCC      300
CCTGCAGCTA CCTCGAG                                     317

```

## (2) INFORMATION FOR SEQ ID NO:1280:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

```

GAATTCGGCC TTCATGGCCT ACTTCCTTTC ATTTTGAAGC AACAGTTTAT AAACAGGAAA      60
GTCTACTGGT TTCATAGAAT CTGTCAGATT TGCTTATTTG CTACTGGTTT CACGCGCGTG      120
GACTATATTC CAGTGTTTCT AGTCAAAGAC CTTTATCCTC AAATCATGAG ATTAGAGTAA      180
AACAACTGCT GTAAGGTTGA GCATTTCATG ACCAATGACT ATGAAGGCAC ATTCACCAAA      240
CACAGGCACT TTAAGGGCAT CCTTGATTAA TTTGCTAATT GCTATTTTTT GTTGGTATGT      300
GAATTCCTGC TAGGAGGCCG AGGCTAGTAG GCAATGAAAA AGACAGAACA ATGGTAAAT      360
GCAGCCCCGG TCCTCTACAA ATTGACAGTA TAATTTAGGG GCTCGAG                                     407

```

## (2) INFORMATION FOR SEQ ID NO:1281:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

```

GAATTCGGCC TTCATGGCCT AAGATTGACA AAGAAATAGA GCTTCACAGA ATTCTTCATC      60
ATAAGCATGT AGTGCAAGTT TACCACTACT TCGAGGACAA AGAAAACATT TACATTCTCT      120
TGGAATACTG CAGTAGAAGG TCAATGGCTC ATATTTTGAA AGCAAGAAAG GTGTTGACAG      180
AGCCAGAAGT TCGATACTAC CTCAGGCAGA TTGTGTCTGG ACTGAAATAC CTTCATGAAC      240
AAGAAATCTT GCACAGAGAT CTCAACTAG GGAACCTCGA G                                     281

```

## (2) INFORMATION FOR SEQ ID NO:1282:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

```

GAATTCGGCC TTCATGGCCT AGTAGTTTAT TATATAGAAA TTATTTGTCC TTGTCTTAGT      60
TGTGCCCTTT GACTCAGCAA TTCCCCTTCT ATAAAAATTTT CCCAAGCAGA TGATTATGGA      120
TATATGCACC AATTTGGAAA CAGGGATGTT TATTGTTTAT AGTAGCACTC AACTGAAAAC      180
AACATAGTTG TCTTCAGGAG CGGGGACTGA TTAAATTATG ACATGAAGCA GAATAATGCA      240
AAATCTCGAG                                     250

```

## (2) INFORMATION FOR SEQ ID NO:1283:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 257 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

```

GAATTCGGCC TTCATGGCCT AGCTGAAGAA GGCCTTCACA GAGCTTCAAG CCAAAGTTAT      60
TGACACTCAA CAGAAGGTGA AGCTCGCAGA CATACAGATT GAACAGCTAA ACAGAACGAA      120
AAAGCATGCA CATCTTACAG ATACAGAGAT CATGACTTTG GTAGATGAGA CTAACATGTA      180
TGAAGGTGTA GGAAGAATGT TTATTCTTCA GTCCAAGGAA GCAATTCACA GTCAGCTGTT      240
AGAGAAGCAG TCTCGAG                                     257

```

## (2) INFORMATION FOR SEQ ID NO:1284:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 434 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

```

GAATTCGGCC TTCATGGCCT AAAGACTAGC ATATTTATCT TTGACTTGAT TAATCAGACC      60
TAATTTGCAT TCGCAAATGA GACTGATAAA AATGGATTTA CCTTTTAACC TTTAGAGGAG      120
GAAAGGTATT TCTCTGCAAG ATTTCTGGGG CTATCGTTTC TTAACCGATA AGAAGCCACT      180
CCTTTATCAA TAAAGATGAA AATCCGCAAT TTGCATTAGT GAATGGGACT GATTATTATA      240
TAGTTAATTA GCATCTGGAA ATGAGGATTA TCTTAATTAC AAAGCACAAT TTCCCTAATA      300
GCTACAAAAC TGTAAGTTTG ATCCATGTGG AAATTGGTAA CATTATTATG TAATTAGTGA      360
TAACATTAAT AGTGTAGAAT ATTTAGATGT AATTTGCATA TGCAAATGTG ATTTACCTGA      420
GCCAAAAACT CGAG                                     434

```

## (2) INFORMATION FOR SEQ ID NO:1285:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 302 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

```

AGCAATATTT ATTTAGACA GACTTCTGCG TTATGACCCG GCTGCTGGGC TACGTGGACC      60
CCCTGGATCC CAGCTTTGTG GCTGCCGTCA TCACCATCAC CTTCAATCCG CTCTACTGGA      120

```

```

ATGTGGTTGC ACGATGGGAA CACAAGACCC GCAAGCTGAG CAGGGCCTTC GGATCCCCCT 180
ACCTGGCCTG CTACTCTCTA AGCATCACCA TCCTGCTCCT GAACTTCCTG CGCTCGCACT 240
GCTTCACGCA GGCCATGCTG AGCCAGCCCA GGATGGAGAG CCTGGACACC CCCGCACTCG 300
AG 302

```

## (2) INFORMATION FOR SEQ ID NO:1286:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 245 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

```

GAATTCGGCC TTCATGGCCT AATCTTTTCT AATTGTCTT AATGCTTAT AATTTTCTAT 60
GCAGAGGTCT TGTAGATCTC TTCCAAGAT ATTGATGTT TGTTGTTTG TTTGTTTGT 120
TGTTTTTTGA GACGGAGTCT CACTCTGTTG CCCAGGCTGG AGTGCAGTGG CGTGATCTTG 180
GCTCACTGCA ACCTCCGCCT CCTGGGTTCA AGCAATTCTC CTGCCTCAGC CTCCCAAGTC 240
TCGAG 245

```

## (2) INFORMATION FOR SEQ ID NO:1287:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 232 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

```

GAATTCGGCC TTCATGGCCT AATTTTTTTT CTCCTCTTTC TTCTAGTACA TATTGATAGG 60
TATAACATAA TTAAGGTTTA AAAAAAATTA GACATAGTTA TTCAGATTTA GGACCAGTAA 120
GGATAGAACT TTCTCTTATT TATGAAAAAA AATGCTAATA ATTTTGGGGC AGTTTTTTCC 180
TTTAATTATT TTTTCAATT TCAAGTTTAA TTTTATTTTA GCTGATCTCG AG 232

```

## (2) INFORMATION FOR SEQ ID NO:1288:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGCCT TCATGGCCTA AGAAGATCAC 60
TTGAATCTGA GAGGTAGAGG CTGCAGTGAG CGAAGATCAC ACCACTGGAC TCCAGCCTGG 120
GCAACAGAGT GAGACCCCTG CTCAAAAACA AAGAAGAGCA CTAGCTTCTC TATCAAGTAA 180
GTGTAGGGTT TTAATAAACA CAAATGGACT TTGGTAGACC AAAACAAAAG CCCACGAGTA 240
TGGAAGTTTC CCTTGAAGTT GGAAATTCAT TTTCCCCCTT ACCCCCCCAA CCCTCGAG 298

```

## (2) INFORMATION FOR SEQ ID NO:1289:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

|   |     |
|---|-----|
| GCGATTGAAT TCTAGACCTG CCTCGAGCCA TACCCATGGT CAGCCTCTTC CTCGTGTTCA | 60  |
| CGGCCTTCGT CATCAGCAAC ATCGGCCACA TCCGCCCGCA GAGGACCATT CTGGCTTTTG | 120 |
| TCTCTGGCAT CTTCTTCATA CTATCGGGCC TCTCCTTGGT GGTGGGCTTG GTTCTTTACA | 180 |
| TCTCCAGCAT CAACGACGAG GTCATGAACA GGCCCAAACA GCTCGAG               | 227 |

(2) INFORMATION FOR SEQ ID NO:1290:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 264 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AGACAACCTCT TAGCTAAATG TGGTTTGGTT TTGAGCTGGA | 60  |
| AGAGAGTACA AGGTGCTTCC GGAAAGCTTC AAGCCTTCGG ATTCTGTGAG TACAAGGAGC  | 120 |
| CAGAATCTAC CCTCCGTGCA CTCAGATTAT TACATGACCT GCAAATTGGA GAGAAAAAGC  | 180 |
| TACTCGTTAA AGTTGATGCA AAGACAAAGG CACAGCTGGA TGAATGGAAA GCAAAGAAGA  | 240 |
| AAGCTTCTAA TGGGAATACT CGAG   | 264 |

(2) INFORMATION FOR SEQ ID NO:1291:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 323 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGGTGCTCTC AAGGATCAGT ACTGGGTAAC AATAATCAAA | 60  |
| CTTTGAATTT AAACATGCAT CTATTATTG TGTTTTTTGT TTTTGTTTT GAGGCAAAGT   | 120 |
| CTCACTCTGT CACCCAGGCT GGAGTGAAGC AGCCCAATCT TGGCTTACTG CAACCTCCAC | 180 |
| CCCCTGGGTT CAAGCAATTC TCCTGCCTCA GTCTACCTAG TGGCTGGGAT TACAGGCGCC | 240 |
| CGCCACCACG CCCAGGTAAT TTTTGTGTTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC | 300 |
| AGGCTGGTCT AGAATTCAAT CGG   | 323 |

(2) INFORMATION FOR SEQ ID NO:1292:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 289 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

```

GCTCGAGAAA CTTCTGCTGC ACGTGCCTCT TCCCCCTCCAC CTTACCCCTT TGTGGCTCAC    60
TCACGCACCC ACTCTCCAGT CCACCCCTCC TCAGAGACCC TGTCCACTCA TCCATCTCTC    120
TCCCATTGCG CTTCTCTTC ACTCGTTCC TTCTGCCTCC CACCATATGC AAATCTTCTC    180
CATCCTTAAA AGCCTGATTG CCTCCTCTGG ATTTTTCAC ACTCTGGGG AACTTCTCTG    240
GACTCCCTGC CCTTCACCAC CAGCCTTTC CAAAGAGAA TCCCTCTCA    289

```

(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

```

GAATTCGGCC TTCATGGCCT AGTTGAAATC TTTAGGAATG AACTTCTGAG GGCCAAAAAA    60
TGTGACTGAC GGAACAATT CTTAACTGA TTAAC TAGCT GTAATATAGT TTTGTGAATT    120
TATTGCAC TGTTGTACC TTGTGGTATA TCTGTCCCTA TTAATAAGT GTTGTTTTCT    180
CCTCTTTAAT ATGCTGTGA ACAGTGGTGC CCATTGTAGC ATATGTTTGA TTTT TTTTA    240
TTATTTCATA AGAAACTAC GTTAATTTTA CCTTACTTTC ATTGTAAATA AGCCTGTCTT    300
CCTATCTGGA TTTTGTGT GCATACATAT TCTACTGATT AACTACTTTT GCAGTTTAA    360
TCCTGTATTA TTTCTTCTAC TTTGTTTGT GTAAAAGGGG AAAAAATAAA AAAAGCTCGA    420
G    421

```

(2) INFORMATION FOR SEQ ID NO:1294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

```

GAATTCGGCC TTCATGGCCT ACAGGTGTAT GTCACCATGC CTGGCTAATT TGT TTTTCT    60
TTTCTTTT TTTT TTTCT AGAGACAGGG TCTCACTATG TTGTCTGTCC TGGCTGGTCT    120
CAAAC TCTG GGCTCCATCT TCCCGCTTCG GCTTCCTGAA GTGCTGGGAT TACAATAGGC    180
ATGAGCCACT ATGCCATCC TAAAGTTTTA CAGCCCAATA ATAGTAATAT TCCATCACTA    240
CAGCTATCAT TGAGTTTCAG AAGTTAGACT GTTAAAAGTT TCAGTAAAGA GCTTTAACCA    300
GTTTATTGTG GCAATACTGT GTACACAATT ATTTTGTGTA AAAGGAAGGA GATTCTGTCT    360
TTAAATAGCT TTAATAAAGT TTCAGTTTCA TATACAGGAA ACCTCGAG    408

```

(2) INFORMATION FOR SEQ ID NO:1295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT ACAGGCACTC CAGTTATAAT TATGTGCCTT TCTTCCATT  | 60  |
| CTACCACTTT CTCTGATACT TCTCACTTCT TTCTCTGGTA CTTCTCACTT CTTTCTCTGG | 120 |
| TATCATTTTC ATTCTTCATC ATTGTTTAG TGCCTTTACT TCAATTCCTT CATATTGTA   | 180 |
| ATTTTCTTT TTATCATCTT GTGATTCACT TTTTATTAT TTTTGATAG TATTCTCCTT    | 240 |
| TTCTTCCATT CCACTCGAG  | 259 |

(2) INFORMATION FOR SEQ ID NO:1296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGTGGAGAGT GCTATCATT ACACCTGAAC TCTGGGCCAG  | 60  |
| CTTAAGTGTA TATTCTGTAA AAAATTGAA ATCCCCCAA TGTCACATGC TATGACAGTC   | 120 |
| ACTTTCTTTA GTACTTTGTA ATCATACAA ATGGTGTATG GGCTAAATAT TGCAGCACCT  | 180 |
| ATGTCGTCAT CCTCCATGTT GCTTATTGAT CATGGAATGT TAATTTAGCA ATAATTTTCT | 240 |
| CTGTGTGTGC GCTCGAG  | 257 |

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGCAAG TAGGGTATGT AGGCTTCAGT TGGTTCTACT TTCAGAGAGT | 60  |
| TAAGATGGAA TGAGGCAGCT CATGGCACTA CAGGTCAGTT GCCTTCTCTC CAAAATGTTC | 120 |
| ACTCATGCAT GTGGGCACTC ATTGTATTTG AATAACAGCA ACAGTGCCTC CCTCAGTTTG | 180 |
| GAACCTCTAG TCCACTTGCT CACTCATGGT CCCTGCCTTA ACCCCAGTCA AGTTCAAAGC | 240 |
| CATAGGCATC ATTTGTCCGA CTGACATATT AGGGCATCTA CCAGTCAAAG GGTGATTGTT | 300 |
| GATAGTGACC TTTGGCCCGT TCTCGAG                                     | 327 |

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:

```

GAATTCGGCC TTCATGGCCT AACTCTCAT GTTGTGTGCA GCATTATTCA CAATAGCCAA      60
GGTATGGAGT CAACCTGAAT GTCGAACACA TGAATGGATA AAGAAAATGT TCACACACAC      120
AATGAAATGT GATTTAGCCT TTA AAAAGAA GGAAATCCTG CCATTGGGAA CAACATGGAT      180
GAACCTGGAG GGCATTGTGC TAAGTGAAAT AAACCAGACA CAGAAAGACA AACACTGCAT      240
GACCTCACTT ACTGTGGAAC CCCTCGAATT CTGGATCTCC CTCGAG                      285

```

## (2) INFORMATION FOR SEQ ID NO:1299:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

```

GAATTCGGCC TTCATGGCCT AATGAATTTA GTATTATTC TATCATTTCA ATTGCAAATT      60
GTCAGTATCC CCGCTACGT TTCTACTAAT TTACCATCGC TTCTCAAAA AATTGTGTTT      120
AGAGTGCTAC AATTTCAGAC TTGAAATGA ATCACTATAA CTTTAAAAA TTAGAGATTT      180
TAAAAACTGG AGATTGAATA TATATAAAAA ATACAAAATT TGACATTTAA AACCTCATTG      240
AACTTTTAA AAAGCCGAC TCATATTAAG GCACACACC TCGAG                      285

```

## (2) INFORMATION FOR SEQ ID NO:1300:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

```

GAATTCGGCC TTCATGGCCT AGGGCCAATG GCCAGGATCT CTGGGGACTA GAAGGGTGGA      60
TTCCTGAACC TGGGTAACAA CGAGACAAAC TCTAGCAATC TGAGCAAGGG AAGGGTCATC      120
AAAGTCCCAA AATCTAGCCC ACTAGCTGCC TAGCCAGGTA AACCAAGGCT TAGGGAGTTT      180
AGACCCCTTC ACATAAAGAA GCTTAATAAA AAGTGTGGG TGAAGAGATA AACACATGAA      240
GGGGTTGGCT AAAGTCAAAA GAAGATCCGA GGCAGGTCTA GAATTCAATC GG          292

```

## (2) INFORMATION FOR SEQ ID NO:1301:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

```

GAATTCGGCC TTCATGGCCT ACTCCTCATT TGCCACCACC AGGCCAGTTT GTCCTTTTCC      60
AAACACAGCA ATCAGGATCG CCTCTGCAA GGATAGAAAA TGAAGTGGA CTCTTAGGAG      120
AACATCTTCC AGTAGGAGGT TTTACTTACC CTCCATCAGC CCACCCCCA ACATTACCTC      180
CATCAGCTCC CTTGAGTTC TTAACATATG ATCCTTTGCA TCAGGAGGTG TCCTTTGGAG      240
TACCTTATCC TCCATTTATG CCTCGGAGGC TTACAGGATA GTAGATACCG ATCCACAGCAG      300

```

```

CCAATACCAC CTCCTCCCTTA TCATCCCAGC TTAGTGCCAT ATGTGTATC AATGCTTCCA 360
GTGCCACCTG CAGTGGGCCC AACTTTCAGC TTTGAATTAG ATGTAGAAGA TGGAGAAGTA 420
GAAAATTACG AGGCCCTGTT AAACCTGGCA GAGCGACTGG GAGAGGCAAA GCCTCGTGGA 480
CTGACTAAAG CAGATATTGA ACAACTTCCT TCTTATCGGT TCAATCCTAA CAACCACCAA 540
TCCTCGAG 548

```

## (2) INFORMATION FOR SEQ ID NO:1302:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

```

GAATTCGGCC TTCATGGCCT AGTATCTATC TAGTGCCTGT TTGTGCGTTT TTTTCTTTCT 60
TCCGCTGCTT CCCCATTTTC CTCTGTCTCT TTTTCTCCTG CTCCTTGTTT TCCCAGCAGC 120
ACATGGGGTT CCTCGGAGGA GCAGAGGTGG CCGCCGTGGG GGGGCGTTTG GGCTGCGGTG 180
CTGCGTCATT TTTCTTTTGC TTTCTCTTTA CTTTAGACAC TGGCCCAACT CCAGGCGTTT 240
CCTTTCATTC CCTCAGTGCT TCTCTTCTGA CCTGCATGTT GAGTTCTGTA TTGCTGGGGC 300
TTCCAACAAA AACCAGAGTC ACTGACAGAG GGAACAGCAG AGACCTTGTT GGTATTCAGC 360
TGTGATGGAT ATAGCGATCT CGAG 384

```

## (2) INFORMATION FOR SEQ ID NO:1303:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

```

GAATTCGGCC AAAGAGGCCT AGGGTACGTG AATCTATTTT TTCAGCTGGA AATTTTATGA 60
AATCTGGTGT GTATTTTATA CTTATAGCAT ATCTCGAGGC AGGTCTAAAT TCAATTCTAG 120
ACCTGCCTCA AGAGCTCGAG 140

```

## (2) INFORMATION FOR SEQ ID NO:1304:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

```

GAATTCGGCC AAAGAGGCCT AAATAAGTTT ACTTTTATTT TTGGTAACAC TTTACTGCAT 60
TGTCTGAATA TTGACAATCA GTATGCATTA TGAAGCTACC TGGCTAACAT TGTGTACTCA 120
CTGTGTGTGC CAGGCCCTGG GTTCAATGCT CTACATGCAC TTATATTTC TTTAATTCTC 180
TCTGCAACCT GAGATGGTAT AGCCACCTCA TTTTACAGAG TTGAACTGA GGCTCAGAGA 240
CTGAAAGTTA AGCCTGAGGT TGCAGTCAAT AAGAGGCAGA GCTGGAACCTG AAACCTACCT 300

```

```

GTGTCTGACC ACCAGTTCGT GTTCTGACGG CAGGCTAGTC TGCATCACAG AGTGTGGAGT 360
AGATGGTGCA TGCCTGCTAG GATGGGCTAG GTATCACTGT AGGTAAGAAA CAGCCCCAAA 420
CTATGGAAAT GTACACCACC GAAGGCTCTT TTCCTGCCCC TGCTGCACAT CCTCCATGGC 480
TCTCCTGTGC CCTGTGCCCC ACATGCCCTC ATCCTGCCAC GAGAATAAAG GAGCAGCCTC 540
CATATGGGAG CTGTCAGCTG CTCTAAGAGA TGAAGGAGAG AGTGGCCCCG CTCAATGGCT 600
CCCAACTCTT CTGCCTCGAG 620

```

## (2) INFORMATION FOR SEQ ID NO:1305:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 736 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

```

GAATTCGGCC AAAGAGGCCT ACTTTTGGCT CAATGTTTTT CAAACTTATT TGACCCCAAA 60
ACCTTTTTC A TATACCCAAT AATAAGCTAC AGAACTAATA TTCTGCAAAT GTCTCTTGGG 120
ACACACTGCC TTAACAGAT ATTTCTATAG CTGTCAGTAT AGTTATGTTG CTCCCAAGCC 180
TAGTTATCTC CAGTTGTTTT AAGGGTGTTA TGAAAAATTC TTAAATATA TATGAATTTG 240
TGTAACACAC ACAGAGACAC ACACACATAC TACTTTAAGG GGGTGAGGAT CATTAAATCA 300
GATAATTTT AAGTTTCCTA GTGATTCTCA ATCTCTTTGA ATTTTACTTA CATTTACACA 360
CACACGCACA CACATATGTA TATACACATA TCATTTAAG AAGCTGAGGA TCACTAATTC 420
AGATAATGTA TAAGTTTCCC AGTGATTCTC AACCTCTTTG AATTTTACTT ATAATACAT 480
ACACACACAC ACTGCTACTT ATATAAATGT TCTCATGTAA TCATGGTAAC AGCTCAAATT 540
CCCAAAGCAA GGAAGACTT CTCATTGTCA GTTAAACCTG TTAACAACATG AAAATATTCA 600
TTGAGCCTAG TTCCTTGTTA TAAAATACAA GAAATAAGAC ATTCAGGCAT TTCCCTTTA 660
TGAAGATGTT CAGTCATCCT TTCCTGAAC TACAATTAGG AAAAGTATAT GTCTTTATTC 720
CATTGAAGTT CTCGAG 736

```

## (2) INFORMATION FOR SEQ ID NO:1306:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

```

GAATTCGGCC AAAGAGGCCT ACAGCAATAT GCATCTTGCA CGTCTGGTCG GCTCCTGCTC 60
CCTCCTTCTG CTAAGGGGG CCCTGTCTGG ATGGGCGGCC AGCGATGACC CCATTGAGAA 120
GGTCATTGAA GGGATCAACC GAGGCTGAG CAATGCAGAG AGAGAGGTGG GCAAGGCCCT 180
GGATGGCATC AACAGTGAA TCACGCATGC CGGAAGGGAA GTGGAGAAGG TTTTCAACGG 240
ACTTAGCAAC ATGGGGAGCC ACACCGGCAA GGAGTTGGAC AAAGGCGTCC AGGGGCTCAA 300
CCACGGCATG GACAAGTTG CCCATGAGAT CAACCATGGT ATTGGACAAG CAGGAAAGGA 360
AGCAGAGAAG CTGGCCATG GGGTCAACAA CGCTGCTGGA CAGGTTGGGA AGGAGGCAGA 420
CAAATGATC CATCATGGG TCCATCACGG GGCCAACCAG GCGGGAAGTG AGGCAGGGAA 480
GTTTGGCCAG GGAGTCGACA ATGCACTCGA G 511

```

## (2) INFORMATION FOR SEQ ID NO:1307:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AATTTTCCC CACACCACAC CACTGTCCTC TGTGCCTGTG  | 60  |
| GAAACCACTC AAATGCCTCT CCCCAAGCCT TCTTTCAGTA ACAACCATCT CATCCGGTTG | 120 |
| ATTACTGTAG CTTTCGGCCT GTATAACCCC TCCTTATGTC ATGCCTGTAC CAGATGTTCC | 180 |
| ACTGCATCTG TATCCCACCA GATTGCACAT ACTCTCGAG                        | 219 |

(2) INFORMATION FOR SEQ ID NO:1308:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 344 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

|  |     |
|--|-----|
| GCACTGCGCC TGGCCCTTGT GGATACTTTC TAGGTGATT T GAGGAGGAAA GGCACAGCCA | 60  |
| TGTCTCCTAA AGTTAACAAG CACTAAGCTT TCCCAAGTAG TGAAATGTCA AGCCTCTGCT  | 120 |
| TCTGTCACCT ATTTGTTTAT TCAGCAGAAA GTCAGTGA GA GCCTTCTGTA CACCAGGCAC | 180 |
| AGTGCTGGGC AGTGAAAGAG ACAGACATGT CCCTGGATCC AGGGAGGAGA TGACCAAGTG  | 240 |
| ATGGCTGTCA GGGCCAGACC TTGCTGTTTG TCTGCAGCCT CTTCCCTCAG GCAACTTGT   | 300 |
| CTCTATCAGG AGAAATGAAA TAATTATTAT CTGGAGCTCT CGAG                   | 344 |

(2) INFORMATION FOR SEQ ID NO:1309:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 565 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGCCTA AAAAGGGTCA GAGGAAGGCA GTATCCTTGG GGTGTTGCTG | 60  |
| AAGTTGAAAA TGGTGAACAT TGTGATTTTA CAATCCTAAG AAATATGTTG ATAAGAACAC | 120 |
| ACATGCAGGA CTTGAAAGAT GTTACTAATA ATGTCCACTA TGAGAACTAC AGAAGCAGAA | 180 |
| AACTGTCAGC TGTGACTTAT AATGGAGTTG ATAACAACAA GAATAAAGGG CAGCTGACTA | 240 |
| AGAGCCCTCG AGTTGCAGGG AGCCCAGATC ATGCCACTGC TCTCCAGCCT GGGTGACAGA | 300 |
| GCAAGACTCT GTGCCCCCCC CCCACCCCAA AAAAAAAGAA AACAAAAATT AAAATCTTTA | 360 |
| GTTACTGTAT TATTCAAAAA TGTCTACTTT CAAGAAAAAC TACAGCCATG CAAAGAAACA | 420 |
| GTAAATGTG ACCATACTCA GGAAAAAAG CAGACAATAG AAATGGCTTC TCAGTAGGGC   | 480 |
| TATATGTTGG ATTTAGCAGG CAAAGACTTC AGAGGCCTTT TAATAAGTAT ATTCAAAGAA | 540 |
| TTACAGGAAA ATATGAAAAA TCGAG                                       | 565 |

(2) INFORMATION FOR SEQ ID NO:1310:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 104 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

TGCACAGCTG TAGTACCCCA AGAAGAAAAT GTTACTTCTC TCATCTGGGC AAAACCCACA 60  
GAAGACTTCC CAGCTTCTGC CACATAAAAG ACACAGAACT CGAG 104

(2) INFORMATION FOR SEQ ID NO:1311:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 105 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

GAATTTGCG TTCTGTTAG CATGCTATCC TGTGTGAAAG AACTGAAAT CCAATATTAT 60  
GGAGAGTATG TTAAAGCCAC CTCTGAAATG AAGACCACTC TCGAG 105

(2) INFORMATION FOR SEQ ID NO:1312:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 407 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

GAATTCGGCC TTCATGGCCT AAAGGGAAGG GAGGTGTGAG GAGGATGGAG TAAGAGTGAG 60  
AGGTCCTAAG AACATGGAGG GAGGCTGTGT GTGATCGATG GAGAAATATG GTCCTGAGAG 120  
ATTTCTTGTA GTCAAGAATG GCCAATACAT GTCTACCTTT AACTGGTATT GGAAGGAAGT 180  
AGTTTCCTGC TCTGTGCTCT AAATACTCTC TATTACCCCTC AAGATGTCAG CAAAATGTGA 240  
TACATAGCAA TCTTGTGTTA GAGATGCTTT AGGAATTGCA GAAAAACCAT GCTATCAAGT 300  
GGTAGGGAAG TGAGTGGCAA GAGGATGTCT GTCACAGAAA CTAGGGATAG AGGGGCTGGC 360  
AATGSCAGAG ATGCAGGTGG AGTGGACTGA TTAAGGGGAG TCTCGAG 407

(2) INFORMATION FOR SEQ ID NO:1313:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 292 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

GAATTCGGCC TTCATGGCCT AGGTCTTGCC ACATTGGCCA GGCTGGTCTC GAACTCCTGG 60

```

GTTCAAGTAG TCCTCCACCT CAGCCTCTCA AAGTACTGGG ATTACAAGCG TTGAGCCACC      120
CTCCCAGCCT TTGCCTTTT TTTTTTTTTT TTTTTTTTGA GGAGGAGAAT TAATTGATAC      180
ATAGACCCCT TAAGAGAAGG GATGCTATGG GCAGGAAGAG ATTGAAGGTA AAGGAAAAAG      240
GATTGAGCAC CCAAGCAAAA CAATTGGCCT GTGATAGAAG GGCGATCTCG AG              292

```

## (2) INFORMATION FOR SEQ ID NO:1314:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

```

GAATTCGGCC TTCATGGCCT AGATCCAAGA AGCTCAACAG ACCTCAAGTA GGATAAACAC      60
AAACAGATCT TCACTAAGTC CTACTGCTGA AAGACAAAGA CGAGGAGAAC ATCTTGAAAG      120
CAGTGAGAGA AAAACAATC ATTATGGAGA GAGCAATGAT AAAATTCTTA TCAGAACAGT      180
GGAGGCCAGA AGGAAATAGA GTGACATATT CAAAATGCTG AAGGAAAAAT TTGCAACTAC      240
AAGTTCTAGA TCCAGCAAAA TTATCCTTCA AGAATGAAGG TTTAGTAAAG ACATTCCAG      300
ACCTTCGAG                                     309

```

## (2) INFORMATION FOR SEQ ID NO:1315:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

```

GGCCCCAGCT CCTGAGTAGC TGGGATTACA GGCATGCACC ACCACACCCA GCTAATTTTG      60
TATTTTGTAGT AGAGACAGGG TTTCAACATG TTGGTCGGGC TGGTCTCAAA CTCCTGACCT      120
CAGTGATCCA CCCGCCTTAG CCTCCCAGAG TGTTAGAATT ACAGGCGTGA GCCACTGCAC      180
CCGGCTGGGA AACATTTTTA AAACGGCGCA GGGTTGTCCT TGAAAGTCCC AGGTTTCCTC      240
ATTGGCCCTG CCATTGGCGG GTGGGTGATT TCAGGCAGGA CACGCAGTGT CTGGGGACCC      300
TGGCTTTCTC ACTGGAAGAC GATTGTTATG GTCCAGAGGG TGGTAACTCA GGTGTTTCATG      360
TCTGATTCTG GATGTTCTCT GCAGCTGCTG GAGTCTCCTG ATTGGAGAGC AGCAAATGAC      420
TGTTCATGA CAGTTCTAGT TGTACCTCTA GCACCCCCAC TCGCTCGAG              469

```

## (2) INFORMATION FOR SEQ ID NO:1316:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

```

GAATTCGGCC TTCATGGCCT AATCTATGTG TGTCAACTTT CATAGAACCC TACACCAAAA      60
AAGGTGAATT TTATTCGTG ATAAATTAAA AAGTAAACA AAAGAGACAA AAATAGTAAC      120

```

CAGGGAAGCT TTCAAAAAAT ATATGTTCTT GTTCAAGACC AGCATGGCCA ACATGGCGAA 180  
 ATCCCATCTC TAATAAAAAAT AGAAAAATTA GCCAGGCGTG GTGGTGGGCG CATGTAGTCC 240  
 CAGCTATCCA GCACCGCTCG AG 262

## (2) INFORMATION FOR SEQ ID NO:1317:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 497 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC TTCATGGCCT AAAGGAATGG TATTTTGGCA ACGCAGACAA AGAAAGGAGT 60  
 GGCCCGTATG GATTTCATGA GATGCAAGAA TTGTGGACCA AAGGAATGTT AAATGCAAAA 120  
 ACCAGATGCT GGGCTCAAGG CATGGATGGA TGGCGACCAC TTCAGTCCAT ACCCCAGCTC 180  
 CGAGTCATAT AAGGTAACCC AGACAACCAC CTACGAATTT AAAGCTCCTA TAAGTTGCCC 240  
 TTTCTGCATC CGAAGTGTGA TATTTGAAAG TTAAAAACGT TATCTTACAT ACATAGATCT 300  
 TAAAAAGTAT CTTACACCAC AACCTACTCA CAGATGCAAA GGCAGTGGTC GTGGTCTTCC 360  
 ATTGCTTGGG GTCTGCGGGC CGGGTTTGAG GCTGAATGTC AGGGTTTCCT TTGCCATAAC 420  
 CTCATTCTGC ACCACGTGCT GTCAGCCAGG CAGCCAATGT GGAAGTGGAG GCTGGCATCT 480  
 GCTGGGCACT GCTCGAG 497

## (2) INFORMATION FOR SEQ ID NO:1318:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 451 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

GAATTCGGCC TTCATGGCCT AATCTGGATG TCTGTCCAAG GCCTGACTGC TGAATCCTA 60  
 CTTTTCCTAC AAAACCCTAC CCACATGGCC CTTCTGCGG GAAGAGATCT TGAGCCTCCC 120  
 TGGCTATTAA GACTCTGCTG TGCAGCCTTC TTTTACTGGA CTCAGGGCTA TCTTCCCAG 180  
 ACTAGGGCCT TCTTGAGGAC AATCGTGGTG GCCCAGTGGT TGACGCTGTC TCCCCTGCAT 240  
 GTAGTTGGTC TTCCTGGTTG CTTCTTGCCC CTGTGGCTCC CTTGGGAGAC TGAAACTCAG 300  
 AGGACAGCTT CTGGTCTGCT GTTACATGGC TCCCACAGGG AGACTGGCCC CACCTGTGCC 360  
 CCACCCATCA CAGCTAGGGC CTGGGATGGG TCAGACACTG GAAGAGCCTC CCCCTAGGCC 420  
 ATGCATATGG ATCGTGCCCA CAGCCTCGA G 451

## (2) INFORMATION FOR SEQ ID NO:1319:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 477 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

```

GAATTCGGCC TTCATGGCCT AACTACGGT ACTCCCAGCA TATCACCTT AATGTAAGT 60
TAAATAACAT GGCCATTTT TAAAAAGGAC ACAGGAACTA CATAACATTT TTTTTCAGAT 120
TTTGGAATAT TCTAAATATG TCTAGAAAAA CTTTCTTTC TGTTCATTC TCCTTCCTAT 180
TCTCCATGAC CCCCTCCCCG CGGACTGTAT CAGGTACAGC CTGTTGGAAA TCCAGCACCG 240
CACATTAGGC ACACCACTGG TAAGTTTACT TGTTGAGTTA TCACCTTTT TTTCTTTTA 300
ATCAGAGAGG CAGCTCTGTG TTGAAGATGC TAGGTAGTGA TGGAAAAGAC ATTAGGAAAA 360
TTTGTTACCG TGGTAACCGG GGATGGACAT CATGACCTT TGTGATATGC ATGCTGTGGC 420
CTTGGTAGTC TCTTCCCTA ATTAACATCC TGTGAGAAAC GTGAGAGATG ACTCGAG 477

```

## (2) INFORMATION FOR SEQ ID NO:1320:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

```

GAATTCGGCC TTCATGGCCT AGACGGAGGC TGGAGATTCA CATGGGGCGA GGAGTTGCAG 60
ACCAGCCTGG GCAAAGCATG GTGAGGCCCC GTCTCTGCAG AAATGAGAAA ATGAGCTGGA 120
TGTTAGTGGCA CCGACATGTG GTCCAGCTG CTGGGAGGGC TGAGGTGGGA GGATTGCTTG 180
AGCCTAGGAG TTCAAGGCTG CGGTGAGTAG ATCGTGCCAC TGGGCTCCAT CCCTGGCAAC 240
AGAGCAAGAT CATTCTCAA AAAGAAAAAA AAAGCCATCT CGAG 284

```

## (2) INFORMATION FOR SEQ ID NO:1321:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

```

GAATTCGGCC TTCATGGCCT AGGGAAATGT GTGATTGGGA AAGAGGCAGC TTTTAAAAAT 60
GTGTCTGGCC TTTGACCACG CAATTTCACT TTCCAGTATT TATTCTAGGA AAATACTCAT 120
ACTATTGCAA AGTTTATATA TAAAGATAGT TATAACTGCA TTGTTTATCA TTTACAAAAA 180
GAAAACATCT GAAAGCCCAA CAAGACGGAA CTGGTTATTC CACATTGGCA CATTCATACA 240
AGGCAATGCT CGAG 254

```

## (2) INFORMATION FOR SEQ ID NO:1322:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

```

GAATTCGGCC TTCATGGCCT AGGCACAGAA AAATTGGAAG GGATTGGTGG TCGTACATCT 60
TGCAGCTCAC TTAGTAGCTG CATGCATGTA GACCGGGTGG TGTGATGCA GTGTTGACTT 120

```

|   |     |
|---|-----|
| GCTGGCATTG GGGTGGGTGG TAGCATGGTC AAGCTGGCTG AGTGATGGGA TATTGTCTCA | 180 |
| GAGGTTGGTG CAGGGAAACT CTGTGGGTGT GTCTAATGCA AGGATAATGA CAATGTCCTG | 240 |
| TCTGCCTGGT CTTTGGGGGG TCAGGTGGAG ATGTCCTTTT GGAAAGGCAG CCATTCTCTT | 300 |
| TGAGTGTCCA GAGGGCATGG TGCAGGCACA TGGATTGAGT GGAGGACTCG AG         | 352 |

## (2) INFORMATION FOR SEQ ID NO:1323:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

|  |     |
|--|-----|
| GAATTCGGCC TTCANGGCCT ACTGTGTGTA GAATTCTGTT TTCTCATGAT ATTGAAGACA  | 60  |
| TTATTCAGT ACTTTGACTG CTAGTATTGC TGTTGAAAAG TCTTAATTGC CCTTCCTTTG   | 120 |
| TAAGTAATAA CCCTTTTATT TGGCTGTGTT AAGCCTTTT TTTTCCTTCC CATTAGTGT    | 180 |
| TTTGAGTTT TGTATAATGT ATTGAGGGCG TTATTTTTTTT CATTCCATCA TTTTATTTTTT | 240 |
| TGTAATCCCA CTGGGGATTC TTTGGGCTTC CTGGATCTGA GGATAATAAT AATGTCCTTG  | 300 |
| AATAATTGTG GAAAATTCTT AACCATATC TCTTTGAATA ATGCCTCTTA TTTTCTCCTT   | 360 |
| CTATAACTCT AATTAGACAT ATAGTCTATT TTTCATGTTA CTTATGCCTT TTCATCCTTT  | 420 |
| TTCGTCTCCA CATACTCGAG  | 440 |

## (2) INFORMATION FOR SEQ ID NO:1324:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TAAATGCCC AGTTACCTGA  | 60  |
| AATTGTATAA ATTCTTGCCA AAAGTGTTG AACCTAATAC AAACCTCCCA TCTCTTACCT  | 120 |
| CTTAGCACTG TGCTCATCTT GAGGGACAT AGTCCCAATT TTGTATTTTA TATAATACTG  | 180 |
| TTAATGAATA TGTGTAGACT TCATATGGTT GTGGGTAAGA GAATACTGCA TTCAGATAGA | 240 |
| AAAGATGCTA TATAGCTAAG TTGATCCGCG GATCCTCGAG                       | 280 |

## (2) INFORMATION FOR SEQ ID NO:1325:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

|   |     |
|---|-----|
| GTTTCCTTTT CTAATTACAA AGAAAATAAA TAGAAATAGA TTTTACATGC TTTATTCTT  | 60  |
| TGAGACAAGC CATTGTAAAT TGTTACTAGA CTAAGTAGTA GTATACCACT CATTGACTGG | 120 |
| TCTTTTCAAC TCCACTCAA TTTGTAAAAA GCAATTCTCT TTATACTATC ATCTTTTTTG  | 180 |

TTTTTAAGG TTTTGTGTG TGTGTTGTTT TTTGGCAAAA CATGATACAT TTCTCATGCT 240  
 TGATCTAAG AGGCTTTACA TAAGAGACAG AGTCGCTCGA G 281

## (2) INFORMATION FOR SEQ ID NO:1326:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

GAATTCGGCC TTCATGGCCT ACTATCTTGA ATGTCCAACT CCAACTCCTA ATTATTTTAA 60  
 AAATCTATGC ACTTCTTTCA CTGGAATTC TATGCCCTCA TAGACTTTAC AGGCACATGT 120  
 TCTATCACCA ATTAAGAGAA ATTTAACTTA CACATTTTAC AACTTATACA TGCAATTTGG 180  
 CTGAGCTTAT ACAGCACAGA TCAACATTAC AATCAATTA CTGCCATGTT AAAAAAAAAA 240  
 TCAGTGAACA TTGTTCCGGT GACCTAATTT TTTGAAATAA GTTGGCCATC AGTGTAATTG 300  
 ATTGAGCTAT CTGTACAACC CCCAACCTAC CTAAGCAAAG GGCTCGAG 348

## (2) INFORMATION FOR SEQ ID NO:1327:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 680 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

GAATTCGGCC TTCATGGCCT ACACGGACTT ACATCCTCAT TACTATTCTG CCTAGCAAAC 60  
 TCAAACTACG AACGCACTCA CAGTCGCATC ATAATCCTCT CTCGAAGGACT TCAAACTCTA 120  
 CTCCCACTAA TAGCTTTTTG ATGACTTCTA GCAAGCCTCG CTAACCTCGC CTTACCCCCC 180  
 ACTATTAACC TACTGGGAGA ACTCTCTGTG CTAGTAACCA CGTTCTCCTG ATCAAGTATC 240  
 ACTCTCCTAC TTACAGGACT CAACATACTA GTCACAGCCC TATACTCCCT CTACATATTT 300  
 ACCACTAACC CTCGAGACCA CTTCATATAA ATACTTATTT ATTTCTTATT TCCCCTGACT 360  
 AGAAATATAA GCTCCATGGT AGCAGAGATT CTGATTGCTG CCTACTCTAT CCCAGCTCC 420  
 TATACTAGGC ACCATGAGTA CATGATCAGA AAATATTCTT GGAAAAAAT ACATAAATGT 480  
 ATAACAATCT TCATTGTGTA GTAAGAAGAT GGGCTCTGGA ATCAGACTGC CTGGATTGAA 540  
 ATCCTAACTT CATCACTTAC TAGTCATGGG ATATTTTACC TCAGTTTCAC TTTTGTGAAA 600  
 TGAAGATAAT AATGTCTACC TTATAGTATT GTGAGGATTA AGTGAATTAA TGCACACAAA 660  
 ATTAGGCCAT GAAGGCCGAA 680

## (2) INFORMATION FOR SEQ ID NO:1328:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

|            |            |             |            |            |            |     |
|------------|------------|-------------|------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | TGTCACCTGAG | CTTCTTGGCT | CTCTTATATA | TATTCTTTAT | 60  |
| TGTCATTTAC | TTTGGTGGAC | GAAGAGAAGG  | AGAGAGTTGG | AATTGGGCCT | GGGTCCTCAG | 120 |
| CACTAGATTG | GCAAGACATA | TTGGATATTT  | GGAACTCCTC | CTTAAATGA  | TGTTTGTGAA | 180 |
| TCCACCTGAG | TTGCCAGAGC | AGACTACTAA  | AGCTTTACCT | GTGAGGTTTT | TGTTTACAGA | 240 |
| TTACAATAGA | CTGTCCAGTG | TAGGTGGAGA  | AACTTCTCTG | GCTGAAATGA | TTGCAACCCT | 300 |
| CTCGGATGCT | TGTGAAAGAG | AGTTTGGCTT  | TTGGCAACC  | AGGCTTTTTC | GAGTATTCAA | 360 |
| GACTGAAGAT | ACTCAGGGTA | AAAAGAAATG  | GAAAAAACA  | TGTGTCTCC  | CATCTTTTGT | 420 |
| CATCTTCCTT | TTATCATTG  | GCTGCATTAT  | ATCTGGAAT  | ACTCTTCTGG | CTATATTTAG | 480 |
| AGTTGACCCA | AAGCTCGAG  |             |            |            |            | 499 |

## (2) INFORMATION FOR SEQ ID NO:1329:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 200 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | CGCTGCCAAA | TGCTTCACTC | CTATCTACTC | TCCCGATTCC | 60  |
| TTATACTTCT | GAACCTCCTC | AACAGAAATC | TTGCTCTCTC | CCTAAATCCT | CAGTGCAACA | 120 |
| TACGTCCGCA | AAACTAAAT  | GATCCCTCCT | CAGCCAGACA | GAAAACTCTC | AACATATCAA | 180 |
| CACCTCCAAG | GCGTGGACAG |            |            |            |            | 200 |

## (2) INFORMATION FOR SEQ ID NO:1330:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 158 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACAGTCTTTT | TAGGCATGTT | TTTTTTTTTT | TTGGTGTGTG | 60  |
| TGATGACAGG | AATATGCATT | TTATCTGTAG | TGGTTTAAA  | TCCTGTATTA | AGCGTTGTTT | 120 |
| TCTTTTCAGA | CTGCAAAATT | CAAAATGGGG | CTCTCGAG   |            |            | 158 |

## (2) INFORMATION FOR SEQ ID NO:1331:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 552 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | GATCATGAAG | CGCTCGGTAG | CCGTCTGGCT | CTTGGTCGGG | 60  |
| CTCAGCCTCG | GTGTCCCCCA | GTTCCGGCAA | GGTGATATTT | GTGATCCCAA | TCCATGTGAA | 120 |
| AATGGAGGTA | TCTGTTTGCC | AGGATTGGCT | GATGGTTCCT | TTTCCTGTGA | GTGTCCAGAT | 180 |
| GGCTTCACAG | ACCCCAACTG | TTCTAGTGTT | GTGGAGGTTG | CATCAGATGA | AGAAGAACCA | 240 |

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| ACTTCAGCAG | GTCCCTGCAC | TCCTAATCCA | TGCCATAATG | GAGGAACCTG  | TGAAATAAGT | 300 |
| GAAGCATACC | GAGGGGATAC | ATTCATAGGC | TATGTTTGTG | AATGTCCCCG  | AGGATTTAAT | 360 |
| GGGATTCACT | GTGAGCACAA | CATAAATGAA | TGCGAAGTTG | AGCCTTGCAA  | AAATGGTGGA | 420 |
| ATATGTACAG | ATCTTGTGTC | TAACTATTCC | TGTGAGTGCC | CAGGCCGAATT | TATGGGAAGA | 480 |
| AATTGTCAAT | ACAAATGCTC | AGGCCCACTG | GGAATTGAAG | GTGGAATTAT  | ATCAAACCAG | 540 |
| CAAATCCTCG | AG         |            |            |             |            | 552 |

## (2) INFORMATION FOR SEQ ID NO:1332:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

|             |             |             |            |            |            |     |
|-------------|-------------|-------------|------------|------------|------------|-----|
| GAATTCGCGG  | CCGCGTCGAC  | CTCAGAACTA  | TTTAAATTGA | GTAAATTAC  | TATTATATTT | 60  |
| TATAGTAAAT  | ATTGGTCCAC  | TTTATAGCTC  | AGAACCTAAA | AAGAGAATAT | GTACCCAAAC | 120 |
| TTCTCTATGT  | TTACAACCAA  | CCCAGAGTTT  | AAGATTCTGA | ATTGTGCTTT | GTTTTGTTAA | 180 |
| AAATTTAACC  | AAGGGTCAGG  | CACAGAGGCT  | CATGCCTATA | ATCCCAGCGC | TTTGGGAGGC | 240 |
| CGAGGCGGGT  | GGATCACTTG  | AGTTTCAGGAG | TTCGGGACCA | GCCTGGCCGG | CATGGTGAAA | 300 |
| CCCCGTCTCT  | ACTAAAAATA  | CAAAAGTTAG  | CCGGGTGTGG | TGGCATGTGC | CTGTGGTCCC | 360 |
| AGCTGCTTGG  | GAGGCTGAGG  | CAGGATAATC  | NCTTGAACCC | AGGAGGCAGA | GGTTGCANTT | 420 |
| GCAGTGAGCC  | GGGATTGTGC  | CATTGTACTC  | CAGCCTAGGC | AACAAGAGCG | AAACTCTGTC | 480 |
| TTAAAAAATA  | AAAAGAAAAA  | AAAATTAACC  | AAGGTTCTCC | TTTCTCTAAA | TCTAGCAATT | 540 |
| TGTTCTATTT  | TTTCAGAAATA | AACTTAATAA  | TTTAAATACA | GATTTTAGCT | TTGGCTTTTT | 600 |
| TCTTACTTTT  | TAGTTTGCAA  | ATTATTTTAT  | GGTATTCCTA | CAAAGTAGAT | ACAAATTTGC | 660 |
| ATTCAGAAATG | CACCTTTTGT  | TTTTCTGGGT  | TTTTTTGTTT | GTTTGTGTTT | TTTTTCAGAA | 720 |
| AACTCATGGA  | AAAGTACACT  | GTTCACCTCA  | GCATCTCGAG |            |            | 760 |

## (2) INFORMATION FOR SEQ ID NO:1333:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT  | ANAAGTGGGT | AAGGAGCAAA | AAAAGTGACA | GAGGCCAGGC | 60  |
| GCGGTGGCTC | ATGCCTACAA  | TCCCAGCACT | CTGGCCAAAT | ATTTGATTTT | AAATTCCTAT | 120 |
| TGTTACTGAT | TAAAAAATAA  | AAAAATCTGG | ACCAGTTAAC | CTGGAGATTT | AGAGGCTATA | 180 |
| GACACAATTT | AACATCCATA  | CAGGCCTGTG | AACTTCATGC | AGAGAACAAA | CAACAAACA  | 240 |
| AAAAGCTTAA | TTTCAGAGTCT | CTCATTTCAG | CTTAGCCAAC | ACATTTGGAG | ACTTAGGGGC | 300 |
| CAGTTCTAGA | AGCTGCTTTT  | ACCTCTAGAC | TGGGAGGGGC | AGGCCCTGTC | ACCGAAGGGA | 360 |
| GGAAAAGTCT | TCTTGGCTGT  | CAGCCCGGAT | TGAAGCCACT | TCGCTTCCCC | TGGCCCCAGC | 420 |
| TTTCCTGCAC | TCTTTTCACC  | GTGTCTGACA | CAGGGCAAC  | CACCAACCAC | TCAAATGAGC | 480 |
| AAACAATTCC | AGAAAAAAGA  | ATCCGAGATA | AAGAATAACC | AACTAGGAGT | CTTTCCATTG | 540 |
| TAGCCTAAAC | CGTCGATTGA  | ATTCTAGACC | TGCCTCGAG  |            |            | 579 |

## (2) INFORMATION FOR SEQ ID NO:1334:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | CAACAAGGGC | AAAGGCCTTG | AGACACAAAC  | CAACTGTGTG | 60  |
| GGTGTAAGG  | TAAGAAAGGC | CAGTGAGGCC | AGCATGATGA | ACTGGGGGAG  | CATGGTGGCT | 120 |
| GATTGTGTCA | GGAAGGGAAC | AGAAACCAGA | CCACTTGGGA | TCTTCTAGCC  | AGAGTAAAGA | 180 |
| GACTGAGTTT | ATTCCTATTG | TAATGGGGAG | CTATTCAGAG | AGGTTAATCA  | TGGAAGTGAT | 240 |
| GTGACCTGAG | CTACACTCTT | AAAAGATGCC | TCTGGCTGCT | GTGTGGAGAA  | TGAACCATGG | 300 |
| GGGCAAAAGC | AGAAACAAGA | AGACCACTTA | AGAGGCTCTT | GCAATAATTT  | ATGTGAGAAG | 360 |
| AGTGATCATC | TTGACTAGGG | TGGTGGTGGT | AGAGGAGGTG | AGTGGTGGTC  | AGGACTGAGA | 420 |
| GGAGCCAACA | GAATTTGCTG | GCTTGCTTGG | ATGTGGGTGA | TGAGGCCAAAC | TGAGAATCCA | 480 |
| AGATGGCACC | AAGGCTTATA | CCCTGAGCAA | CTGAACTCGA | G           |            | 521 |

(2) INFORMATION FOR SEQ ID NO:1335:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 775 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAAATTCGCG | GCCGCGTCGA | CGCTCTTGAG | TGAGACCCAA | CAAGCTGCTT | TTCACCAAAT | 60  |
| TGCAATGGAG | CCTTTTCGAA | TCAATGTTCC | AAAGCCCAAG | AGGAGAAATG | GGGTGAACTT | 120 |
| CTCCCTAGCT | GTGGTGGTCA | TCTACCTGAT | CCTGCTCACC | GCTGGCGCTG | GGCTGCTGGT | 180 |
| GGTCCAAGTT | CTGAATCTGC | AGGCGCGGCT | CCGGGTCCTG | GAGATGTATT | TCCTCAATGA | 240 |
| CACTCTGGCG | GCTGAGGACA | GCCCGTCCTT | CTCCTTGCTG | CAGTCAGCAC | ACCTTGGAGA | 300 |
| ACACCTGGCT | CAGGGTGCAT | CGAGGCTGCA | AGTCCTGCAG | GCCCAACTCA | CCTGGGTCCG | 360 |
| CGTCAGCCAT | GAGCACTTGC | TGCAGCGGGT | AGACAACTTC | ACTCAGAACC | CAGGGATGTT | 420 |
| CAGAATCAAA | GGTGAACAAG | GCGCCCCAGG | TCTTCAAGGT | CACAAGGGGG | CCATGGGCAT | 480 |
| GCCTGGTGCC | CCTGGCCCCG | CGGGACCACC | TGCTGAGAAG | GGAGCCAAGG | GGGCTATGGG | 540 |
| ACGAGATGGA | GCAACAGGCC | CCTCGGGACC | CCAAGGCCCA | CCGGGAGTCA | AGGGAGAGGC | 600 |
| GGGCCTCCAA | GGACCCAGG  | GTGCTCCAGG | GAAGCAAGGA | GCCACTGGCA | CCCCAGGACC | 660 |
| CCAAGGAGAG | AAGGGCAGCA | AAGGCGATGG | GGGTCTCATT | GGCCCAAAAG | GGGAAACTGG | 720 |
| AACTAAGGGA | GAGAAAGGAG | ACCTGGGTCT | CCCAGGAAGC | AAACAGAGAC | TCGAG      | 775 |

(2) INFORMATION FOR SEQ ID NO:1336:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 155 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GTAGATTTAG | ATGTACAGAT | AGAGGTATGA | TTTTTTTAA  | AGGCACCTCA | GTATGGGTAA | 60  |
| TGTTATCTTT | CTTGTGTTTC | AGTGACACA  | CATACACACA | CACCATAGAT | GCAAAGTGTG | 120 |
| TAGAAAATGT | ATTGAAGGAT | ACCCAGGTAC | TCGAG      |            |            | 155 |

## (2) INFORMATION FOR SEQ ID NO:1337:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 138 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

```
GAATTCGCGG CCGCGTCGAC ATTCATGCAA ATAAATATAT TACTAAAATG CTACCTGTTT    60
CTTTTTCCTC TTTTCTTCC AGTTTGTAGT TATGAGATTG GGTCTTGCTA TGCTGCCCAT    120
GCTAGGCATG AACTCGAG                                         138
```

## (2) INFORMATION FOR SEQ ID NO:1338:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 249 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

```
GAATTCGCGG CCGCGTCGAC CTAAACCGTC AATTCTTCCC ATCTTAGGTT TCTCTCCTCG    60
GAAGCCTTCT CTTTAGAATC GAACATTTTC TCTTCTGGCT TTGTTGGGAT GGTTCCTGGT    120
CTGTTTCTTT CTTGCTCCCT CGTGGCTTTC ACTTCTGTTT TCTTTCCCAG AATGACGGTC    180
CTCTCATTG ACCGTGTGCT TTCCGAAGCA CCTGCTGCCA CCTTGCTCTG GCGATCCCGG    240
TTACTCGAG                                         249
```

## (2) INFORMATION FOR SEQ ID NO:1339:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 108 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

```
GAATTCGCGG CCGCGTCGAC AAAACAACAC ATTTTAAAGA TTACGTGCTT CTTGGTACAG    60
GTTTGTGAAT GACAGTTTAT CGTCATGCTG TTAGTGTGCA TCCTCGAG                                         108
```

## (2) INFORMATION FOR SEQ ID NO:1340:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 652 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AATAGAAGGC | ATTCCATATT | TGTTCAATGA | ATTAACAAAT | 60  |
| GTTTTTCATA | TTAATTGTTC | TGATTTTAC  | CTCCTTAGGC | CAGCCTTTAT | TATTGCCATA | 120 |
| TAAGCCTTCT | GGTAGTACCA | AGATGTATTA | TGTTCCACAA | TTAAGACAAA | TTCTCCATC  | 180 |
| TCCGGATTCC | AAATCAGATA | CCACCGTTGA | AAGCTCCCAT | TCAGGATCCA | ATGATGCCAT | 240 |
| TGCTCCAGAC | TTCCAGCTC  | AGGTGCTAGG | CACAAGAGAT | GATGACCTCT | CAGCCACTGT | 300 |
| TAACATTAAA | CATAAAGAAG | GAATCTACAG | TAAGAGGGTA | GTGACTAAGG | CATCCTTGCC | 360 |
| AGTGGGAGAA | AAACCCTTGC | AGAATGAAAA | TGCAGATGCC | TCAGTTCAAG | TGCTAATCAC | 420 |
| TGGGGATGAG | AACCTCTCAG | ACAAAAACA  | GCAAGAGATT | CACAGTACAA | GGGCAGTGAC | 480 |
| TGAGGCTGCC | CAGGCTAAAG | AAAAAGAATC | TTGCAGAAA  | GATACTGCAG | ATTCCAGTGC | 540 |
| TGCTGCTGCT | GCAGAGCACT | CAGCTCAAGT | AGGAGACCCA | GAAATGAAGA | ACTTGCCAGA | 600 |
| CACTAAAGCC | ATTACACAGA | AAGAGGAGAT | CCATAGGAAG | AACGACCTCG | AG         | 652 |

## (2) INFORMATION FOR SEQ ID NO:1341:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACGTGCCATT | TCTCTTCCAC | TATGAGAGGA | CCGATTGTAT | 60  |
| TGCACATTTC | TCGGGCTTTC | TGTAGCCTTC | TGCTTTTCAG | CGTTGCCACA | CAATGTCTGG | 120 |
| CCTTCCCCAA | AATAGAAAGG | AGGAGGGAGA | TAGCACATGT | TCATGCGGAA | AAAGGGCAGT | 180 |
| CCGATAAGAT | GAACACCGAT | GACCTAGAAA | ATAGCTCTGT | TACCTCAAAG | CAGACTCCCC | 240 |
| AACTGGTGGT | CTCTGAAGAT | CCAATGATGA | TGTCAGCAGT | ACCATCGGCA | ACATCATTAA | 300 |
| ATAAAGCATT | CTCGATTAA  | AAAGAAACCC | AGCCTGGACA | AGCTGGGCTC | ATGCAAAACG | 360 |
| AACGCCCTGG | TGTTTCCACA | CCTACTGAGT | CAGGTGTNCC | TCAGCTGAAG | AAGTATTTGG | 420 |
| TTCCAGCCAG | CCAGAGAGAA | TATCTCNTGA | AAGTGGANTT | GCCAAGGCCA | TGTTAACCAT | 480 |
| TGCTATCACT | GCGACTCCTT | CTCTGACTGT | TGATGAAAAG | GAGGAACCTC | TTACAAGCAC | 540 |
| TAACTTTCAG | CCCATTGTAG | AAGAGATCAC | AGAAACCACA | AAAGGTTTTT | TGAAGTATAT | 600 |
| GGATAATCAA | TCATTTGCAA | CTGAAAGTCA | GGAAGGAGTT | GGTTTGGGAC | ATTACACCTT | 660 |
| ATCCTATGTG | AATACTAAGG | AAATGCTAAC | CACCAATCCA | AAGACTGAGA | AATTTGAAGC | 720 |
| AGACACAGAC | CACAGGACAA | CTTCTTTTCC | TGGTGTGAG  | TCCACAGCAG | GCAGTGAGCC | 780 |
| TGGAAGCCTC | ACCCCTGATA | AGGAGAAGCA | CCTCGAG    |            |            | 817 |

## (2) INFORMATION FOR SEQ ID NO:1342:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGCACCATGG | ACAACCCACA | GGCTCTGCCA | CTCTTCTTAC  | 60  |
| TCCTGGGGAT | CCTCACCTCT | AGAGCCTCTT | CTGGACTTCA | GCAAACCAAC | TTCTCTCTCTG | 120 |
| CCTTCTCTTC | AGACTCAAAG | AGCTCTTCCC | AGGGGCTGGG | TGTGGAAGTT | CCCTCCATCA  | 180 |
| AACCTCCCAG | CTGGAAGATT | CCAGATCAGT | TCCTGGATT  | AAAAGCCTCT | GCTGGAATCT  | 240 |
| CTGATTCCAG | CTGGTTTCCT | GAGGCCCTGA | GTTCCAACAT | GTCTGGGTCC | TTCTGGTCAA  | 300 |
| ATGTTTCTGC | TGAGGGCCAA | GATTTGAGCC | CGGTTTCCCC | CTTCTCTGAA | ACCCCTGGTT  | 360 |

CTGAAGTATT TCCTGATATT TCGGATCCTC AAGTTCCTGC CAAAGACCCC AAGCCTTCCT 420  
TCACTGTAA GACCCAGCT TCAAACATTT CTACTCAAGT CTCCCATCTC CTCGAG 476

## (2) INFORMATION FOR SEQ ID NO:1343:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 726 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

GAATTCGCGG CCGCGTCGAC CAGGAAATGA AGACATTGCC TGCCATGCTT GGAAGTGGGA 60  
AATTATTTTG GGTCTTCTTC TTAATCCCAT ATCTGGACAT CTGGAACATC CATGGGAAAG 120  
AATCATGTGA TGTACAGCTT TATATAAAGA GACAATCTGA ACACTCCATC TTAGCAGGAG 180  
ATCCCTTTGA ACTAGAATGC CCTGTGAAAT ACTGTGCTAA CAGGCCTCAT GTGACTTGGT 240  
GCAAGCTCAA TGGACAACA TGTGTAAAAC TTGAAGATAG ACAAACAAGT TGAAGGAAG 300  
AGAAGAACAT TTCATTTTTC ATTCTACATT TTGAACCAGT GCTTCCTAAT GACAATGGGN 360  
TCATACCGCT GTTCTGCAAA TTTTCAGTCT AATCTCATTG AAAGCCACTC AACAACTCTT 420  
TATGTGACAG GAAAGCAAAA TGAATCTCT GACACAGCAG GAAGGGAAAT TAACCTGGTT 480  
GATGCTCACC TTAAGAGTGA GCAAACAGAA GCAAGCACCA GGCAAAATTC CCAAGTACTG 540  
CTATCAGAAA CTGGAATTTA TGATAATGAC CCTGACCTTT GTTTCAGGAT GCAGGAAGGG 600  
TCTGAAGTTT ATTCTAATCC ATGCCTGGAA GAAAACAAAC CAGGCATTGT TTATGCTTCC 660  
CTGAACCATT CTGTCATTGG ACTGAACTCA AGACTGGCAA GAAATGTAA AGAAGCACCA 720  
CTCGAG 726

## (2) INFORMATION FOR SEQ ID NO:1344:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

GAATTCGGCC AAAGAGGCCT AGGGACAGCA ATCAAGTTCT AATGGTGCTC ACTTTT TAGG 60  
TCACCTTCAT CACAGACTGC TCCAAAGGCA GAGCAATGTG GAACGAACCA GCACATTTAC 120  
TTAAGATCAA AGTATGATAC ATCTCTTTGA GCGCCTCACT TCACAATAGG GATCCATTCA 180  
TTGGCTTCCA GATGATGTTT ACAGTTCATG TAACACTGAT ACTGACTTTG TTCCTTATGT 240  
TTAGACAGCT TCTCTGTCTA TACTTCTCAG AAACACCATC AACCAGAACA GAGCCACTTA 300  
TTATCCACAA AAGTTGCATC AACCAGCTTA CCTTCTGGGA GGGATGGATG GTACCCAAAT 360  
ACTCAAAC TG AATCCTATAG TGTGGAGCAA CCAAACAGAA AACAGTCCAA GGATTCAGGA 420  
AATGGTAAAA ACATTTTAAA TCTAAATAGT AGTTATTTTC ATTTTGTCTT GCTCCACCT 480  
CGAG 484

## (2) INFORMATION FOR SEQ ID NO:1345:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

|   |     |
|---|-----|
| GAATTCGCGG CCGCGTCGAC ATGAGTTTAA TTTTTTTTTT TTTTTTTACA CTTTACATAG | 60  |
| AAATAGGATT ATGTGGGCTG GGCACAGGGA CTGACGCCTG TAATCCCAGC ACGTGGAGGC | 120 |
| TCGAG   | 125 |

## (2) INFORMATION FOR SEQ ID NO:1346:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

|  |     |
|--|-----|
| GAATTCGCC AAAGAGGCCT AGACCCAGCG TACATACTGA ATGATCTCTA CATCTCAGAC   | 60  |
| TACTGTGTGT GGATTACAGAA AGTCAAATCC AAAAAGTTGG CAGCTCTTGC AGAAGCCTTA | 120 |
| AAGGAAGTCT CCCTTACAAA GGCCAGCTG GGGTAGAAC TGAAGAAGT AGAAGCAGCA     | 180 |
| GCACTGCTTG TCCAGGAGGA AGAACTGCA TTAAAGCAG CCCATTCAGT TCTGGGCAG     | 240 |
| CAGACACTTT GCTCCAGCTC TGAGGCAAGT GATTGCGAGG ACTCAGACAG CAGCGTGTCA  | 300 |
| TCTGGAACG AAGACTCAGG CTCAGATTCA GAACAAGATG AACTCAAAGA TAGTCCATCT   | 360 |
| GAGACAGTCA GTTCTTTGCA AGGTCCCTTT CTTGAAGAAA GCAGTGCCTT TCTTATTGTT  | 420 |
| GATGGTGGAG TACGCAGAAA CACAGCCATC CAGGAGTCTG ATGCCAGTCA GGGAAAGCCA  | 480 |
| CTTGCCTCTT CCTGGCCTCT TGGAGTGTCT GGGCCTCTGA TAGAGGAGCT TGGGGAACAA  | 540 |
| CTGAAGACTA CAGTTCAGGT TTCTGAACCC AAGGSCACCA CTGCTGTAAA CCGCAGCAAT  | 600 |
| ATTCAGGAGA GAGACGGCTG TCAGACACCA AATAATTGAC TCTTAGGTGG TTTTATTCAT  | 660 |
| TGTTGAGAAA TATGGTAGAT TGGGTTTCAT TTACCGAATG AGAATTCCTC ATTTTCACTT  | 720 |
| TGTAATTTTT CTTAGTATAT AGTCAGCCCA CACTCTCGAG                        | 760 |

## (2) INFORMATION FOR SEQ ID NO:1347:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

|   |     |
|---|-----|
| GAATTCGCGG CCGCGTCGAC CATTTGAGA GTCCGTCTTG TAAATGTTG GCACTTTGCT   | 60  |
| ACTTTATTGC TTCTTTCTGG CGACAGTTCC AGCACTCGCC GAGACCGGCG GAGAAAGGCA | 120 |
| GCTGAGCCCC GAGAAGACG AAATATGGGG ACCCGGGCTA AAAGCAGACG TCGTCTTCC   | 180 |
| CGCCCCCTAT TTCTATATTC AGGCAGTGGG TACATCAGGG AATAAATTCA CATCTTCTCC | 240 |
| AGGCGAAAAG GTCTTCCAGG TGAAAGTCTC AGCACCAGAG GAGCAATTCA CTAGAGTTGG | 300 |
| AGTCCAGGTT TTAGACGAA AAGATGGGTC CTTCATAGTA AGATACCTCG AG          | 352 |

## (2) INFORMATION FOR SEQ ID NO:1348:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | TCTAGGTTTT | CTGATTTTGA | TGGTAATATG | GTATTCTGGG | 60  |
| AAATATCTGT | CCAAATTATC | CTGATCTCTG | AACTCCTGCT | GTGAGGTCA  | GTCACCTCAC | 120 |
| ACAATACCAT | GATGACAGCT | TTATCAAGCC | AGATGCTTAG | TCAGAGCTTT | CCAAGACCCA | 180 |
| GCTTTGGTTT | TATCAGCAA  | ATCCATCCTT | CCCACCCCC  | ATACACACGC | CAGTTTGAGA | 240 |
| CTCCTCTCGA | G          |            |            |            |            | 251 |

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | CTAAACCGTC | GATTGAATTC | TGGACCTCCT  | GTGCAAGAAC | 60  |
| ATGAACCATC | TGTGGTTCTT | CCTTCTCCTG | GTGGCAGCTC | CCAGATGGGT  | CCTGTCCAG  | 120 |
| GTGCAGGTGC | AGCAGTCGGG | CCCTAGACAG | GTGAAGCCTT | CGGAGACCCT  | GTCCTCAGT  | 180 |
| TGTACTGTCT | CTCTCGGCGC | CATGAATGGT | CATTACTGGA | CCTGGATCCG  | GCAGACCCCG | 240 |
| GGAGGGAGAC | TGGAGTGGAT | TGGATCTGTC | TATTATAATG | GAACACAGAGT | GTATCACCCC | 300 |
| TCCCTCGAG  |            |            |            |             |            | 309 |

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

|            |            |            |             |            |            |     |
|------------|------------|------------|-------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | AATTACTACC | ATTGTTAAGT  | GTCTCTTTAA | CTAAACTCAT | 60  |
| TGTTTAAAG  | TTTTCTCCCT | CTCTGTTTCT | AAATCCAAAT  | TTCTGCTCTG | GAATATATGT | 120 |
| TAGAAGAGAT | ACATTGTGTG | GAATGTTTGC | ATTTCTTTTA  | TGAAATGCAG | TATCTTTTGG | 180 |
| GGAATATTAT | GTAAATGAAA | TACCAATTAT | TTTAAAAGAG  | CATTTTGTG  | TGACATAGTG | 240 |
| CTTTCACAAA | CTAAACTGG  | AATTTCTTTC | TTTAGTCTAT  | CTATATCTTT | TGAAAATGTT | 300 |
| GACACAGCTA | AGAAGAAGCT | GCCTGTTTCT | ATCTTAGATG  | GTCTGACCCT | CAGCTACAAG | 360 |
| GTATATGCTG | ATATTCCTTG | TATGAACCGT | GTTTTCTGCT  | AACATTAAAA | CATGCAAGTA | 420 |
| ATTGGTTACT | TTCTAATTTT | GTTTTTGTTT | CATAGGTCCC  | ATGGCCCGTG | GACATTGTTA | 480 |
| TAAGTTTGA  | ATGTCAAAAA | ATTTATAATC | AAGTGTCTTCT | TCTCTTATTG | CAAATAAAGT | 540 |
| GGGCATCCTC | GAG        |            |             |            |            | 553 |

(2) INFORMATION FOR SEQ ID NO:1351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

|            |            |             |            |            |             |     |
|------------|------------|-------------|------------|------------|-------------|-----|
| GAATTCGCGG | CCGCGTCGAC | TTTATTTTCAG | TGGATTCTCT | AGGATTTTCT | ATATAAAAGA  | 60  |
| TGTCATCTGA | TAGAGTAGTT | TACTTCTTCG  | TTTCCAACCT | GAATGGCTTT | TATTTTCATCT | 120 |
| CTTTCCTAAC | TGTCCTGGCT | AGAACCTCCT  | TTACCACGTT | GAATGGAAGT | GGCAAGAATG  | 180 |
| AACATCCTTG | TCTTGTTCCT | GATTTCGAG   |            |            |             | 209 |

(2) INFORMATION FOR SEQ ID NO:1352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | AATGGCTTTT | CTTCCTTCCT | GGGTTTGTGT | ACTAGTTGGT | 60  |
| TCCTTTTCTG | CTTCCTTAGC | AGGGACTTCC | AATCTCTCAG | AGACAGAGCC | CCCTCTGTGG | 120 |
| AAGGAGAGTC | CTGGTCAGCT | CAGTGACTAC | AGGGTGGAGA | ACAGCATGTA | CATTATTAAT | 180 |
| CCCTGGGTAT | ACCTTGAGAG | AATGGGGATG | TATAAAATCA | TATTGAATCA | GACAGCCAGG | 240 |
| TATTTTGCAA | AATTTGCACC | AGATAATGAA | CAGAAATATT | TATGGGGGTT | GCCTCTGCAG | 300 |
| TATGGCTGGC | AATATAGGAC | AGGCAGATTA | GCTGATCCAA | CCCGAAGGAC | AAACTGTGGC | 360 |
| TATGAATCTG | GAGATCATAT | GTGCATCTCT | GTGGACAGTT | GGTGGGCTGA | TTTGAATTAT | 420 |
| TTTCGTCTTT | CATTACCCTT | TCTTGCTGCG | GTGATTCTG  | GTGTAATGGG | GATATCATCA | 480 |
| GACCAAGTCA | GGCTTTTGCC | CCCACCCAAG | AATGAGAGGC | TCGAG      |            | 525 |

(2) INFORMATION FOR SEQ ID NO:1353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGGCTCCTAA | AATAAATAAT | CCACATAATT | GTAAATGAAA | 60  |
| CACATCAAGG | ATTTGAGTTA | ATAGCCTCTG | AGCAGCATT  | ATATAGCCAT | TAGACTGGAG | 120 |
| TATTTGTTAT | CAAGAGGGCC | AGAGAACCCA | COGCTAAAGC | CGTAGGGTGG | GAGGAACCTT | 180 |
| GGATTGCAGC | TACATGGCTT | ATGTAGGGAG | TTGTAAACAG | CCCCAAGCTG | AAACCAGCTT | 240 |
| CTACACCCAT | GACTGTTGAG | TGATTGAATT | CTAGACCTGC | CTCGAG     |            | 286 |

(2) INFORMATION FOR SEQ ID NO:1354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | CAACAAGAGC | ACTGGCCAAG | TCAGCTTCTT | CTGAGAGAGT | 60  |
| CTCTAGAAGA | CATGATGCTA | CACTCAGCTT | TGGGTCTCTG | CCTCTTACTC | GTCACAGTTT | 120 |
| CTTCCAACCT | TGCCATTGCA | ATAAAAAAGG | AAAAGAGGCC | TCCTCAGACA | CTCTCAAGAG | 180 |
| GATGGGGAGA | TGACATCACT | TGGGTACAAA | CTTATGAAGA | AGGTCTCTTT | TATGCTCAAA | 240 |
| AAAGTAAGAA | GCCATTAATG | GTTATTCATC | ACCTGGAGGA | TTGTCAATAC | TCTCAAGCAC | 300 |
| TAAAGAAAGT | ATTGCCCCAA | AATGAAGAAA | TACAAGAAAT | GGCTCAGAAT | AAGTTCATCA | 360 |
| TGCTAAACCT | TATGCATGAA | ACCACTGATA | AGAATTTATC | ACCTGATGGG | CAATATGTGC | 420 |
| CTAGAATCAT | GTTTGTAGAC | CCTTCTTTAA | CAGTTAGAGC | TGACATAGCT | GGAGATACT  | 480 |
| CTAACAGATT | GTACACATAT | GAGCCTCGGG | ATTTACCCCT | ATTGATAGAA | AACATGAAGA | 540 |
| AAGCATTAA  | ACTTATTCAG | TCAGAACTCG | AG         |            |            | 572 |

## (2) INFORMATION FOR SEQ ID NO:1355:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | TGAAAAGTAG | GTTTTTGAAG | AGATATATTC | GAAATATATT | 60  |
| TTTTCACTTG | AAAAAAGTAA | AAATTTTTTT | CAAAAGCAAA | TAATTCAACT | CTAAAATTAT | 120 |
| ACTATTTCAA | CATTCTCATT | TATGTGAAAG | CATGTGATAA | ATTGTTGCTG | CGTCAGAGAT | 180 |
| ATGAGAAACT | CCTTTGCATT | AGGTGGGCAT | TATTCATAGA | CTTCTACATG | AAAGAGAAGA | 240 |
| GAAATAAAG  | ATGCACCAGG | ATTCTCGAG  |            |            |            | 269 |

## (2) INFORMATION FOR SEQ ID NO:1356:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAA | CCCAGCAAAA | TGGGGATCTC | CACAGTCATC | CTTGAAATGT | 60  |
| GTCTTTTATG | GGGACAAGTT | CTATCTACAG | GTGGGTGGAT | CCCAAGGACT | ACAGACTACG | 120 |
| CTTCACTGAT | TCCCTCGGAG | GTGCCCTTGG | ATACAACTGT | AGCAGAAGGT | TCTCCATTTC | 180 |
| CCTCGGAGTT | GACCCTGGAG | TCAACTGTAG | CAGAAGGTTT | TCCGATTTC  | TTGGAGTCAA | 240 |
| CCCTGGAGTC | AACTGTAGCA | GAAGGTTCTC | TGATTCCCTC | AGAGTCAACC | CTGGAGTCAA | 300 |
| CTGTAGCAGA | AGGATCTGAT | TCTGGTTTGG | CCCTGAGGCT | GGTGAATGGA | GATGGCAGGT | 360 |
| GTCAGGGCCG | AGTGGAGATC | CTATACCGAG | GCTCCTGGGG | CACCGTGTGT | GATGACAGCT | 420 |
| GGGACACCAA | TGATGCCAAC | GTGGTCTGTA | GGCAGCTGGG | TTGTGGCTGG | GCCATGTCAG | 480 |
| CTCCAGGAAA | TGCCTGGTTT | GGCCAGGGCT | CAGGACCCAT | TGCCCTGGAT | GATGTGCGCT | 540 |
| GCTCAGGACA | CGAATCCTAC | CTGTGGAGCT | GCCCCACAAA | TGGCTGGCTC | TCCCATAACT | 600 |
| GTGGCCATGG | TGAAGATGCT | GGTGTATCT  | GCTCAGCTGC | CCAGCCTCAG | TCAACACTCA | 660 |
| GGCCAGAAAG | TTGGCCTGTC | AGGATATCAC | CACCTGTACC | CACTAGACTC | GAG        | 713 |

## (2) INFORMATION FOR SEQ ID NO:1357:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 925 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

```

GAATTCGGCC AAAGAGGCCT AGAATAATGC ATATACTGCC ATGTCAGATT CCTACTTACC      60
CAGTTACTAC AGTCCCTCCA TTGGCTTCTC CTATTCTTTG GGTGAAGCTG CTTGGTCTAC      120
GGGGGGTGAC ACAGCCATGC CCTACTTAAC TTCTTATGGA CAGCTGAGCA ACGGAGAGCC      180
CCACTTCCTA CCAGATGCAA TGTTTGGGCA ACCAGGAGCC CTAGGTAGCA CTCCATTCT      240
TGGTCAGCAT GGTTTAAATT TCTTTCCAG TGGGATTGAC TTCTCAGCAT GGGGAAATAA      300
CAGTTCTCAG GGACAGTCTA CTCAGAGCTC TGGATATAGT AGCAATTATG CTTATGCACC      360
TAGCTCCTTA GGTGGAGCCA TGATTGATGG ACAGTCAGCT TTTGCCAATG AGACCCCAA      420
TAAGGCTCCT GGCATGAATA CTATAGACCA AGGGATGGCA NCACTGAAGT TGGGTAGCAC      480
AGAAGTTGCA AGCAATGTTC CAAAGTTTGT AGGTTCTGCT GTTGGTAGCG GGTCCATTAC      540
TAGTAACATC GTGGCTTCCA ATAGTTTGCC TCCAGCCACC ATTGCTCCTC CAAAACCAGC      600
ATCTTGGGCT GATATTGCTA GCAAGCCTGC AAAACAGCAA CCTAAACTGA AGACCAAGAA      660
TGGCATTGCA GGTCAAGTC TTCCGCCACC CCCGATAAAG CATAACATGG ATATTGGAAC      720
TTGGGATAAC AAGGGTCCCG TTGCAAAAGC CCCCTCACAG GCTTTGGTTC AGAATATAGG      780
TCAGCCAACC CAGGGGTCTC CTCAGCCTGT AGGTCAGCAG GCTAACAATA GCCCACCAGT      840
GGCTCAGGCA TCAGTAGGGC AACAGACACA GCCATTGCCT CCACCTCCAC CACAGCCTGC      900
CCAGCTTTCA GTCCAGCAAC TCGAG                                         925

```

(2) INFORMATION FOR SEQ ID NO:1358:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

```

GAATTCGCGG CCGCGTCGAC AAATAAACCC AGCAACTTCA TTCATTGGCC TTATGTTTAT      60
TGAGGGCCTG CTAGTGCTGG GCACTGTTCT AGGCCCTGGG AATTTATTAG TGAGCAAAAC      120
AGCAAAATCT CTGTCCTCAT GGAGCTCACA ATATAGTAGG GAACGACTCG AG              172

```

(2) INFORMATION FOR SEQ ID NO:1359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 770 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

```

GAATTCGGCC AAAGAGGCCT AAGTCAGTGA GGTGGAGTCC GTTTTGGAGG TCACGCGGCT      60
AGTAATTGGA GCCTGGTTTA GAACCAAGTC AGTCTCATTC CAGAATCCAG AACCAGTGAT      120
TTGTAAGTGA TGCACTTGTC TCCAAAGGGA TCCAGCACTG GGTTTTCTCA TTTTAAATGC      180
ATCCATTCTT TAAAGCCTCT GTTCACAGTC ACAAGGTGTA CTTTTTAAAG GAACACAGCA      240
CACAAATGTG ACCGCTAGTG GACAGCAGTG GCAGCCCACT TGGATGGCAG AGCCTGGCAT      300

```

```

GCCGACTGGG ACAGAAGCCC CAGCACACGG TGTGATGATG GCGTCTCCAG GCTGACCTCC 360
ATGGCCTCAG GAATCAAAGT CCTCGGTCTC TTTCACGCGG GGTTCCAGAAA GAAAACTCGG 420
CTATCTTACA TCTCCTCTCC CTGTTTATT TGAATAAGT GAAAGTTCATG TGGCTTGAGC 480
CTCGTTTCTT GGGGAAATCA GCCTGGCTTA GGATTCCATT GTCTTCTGGG ACTGGGAAGA 540
TGTGGAAGGC TGACCTCAGC CCCAGCTGAA GGTCACCTTC CCAGACTCTG AGCTCGGCTG 600
CCTTCTGCAT CGCCACGGCT GGAGGGCCTG GCCCAGGCCG TGGCTGCATG CTGGCTTTCC 660
ACTGTCTCGG TGTCCCTGCT GCCTGTGAGT AATGTGCCCA GCACCTTCTG GTGTCATGTC 720
CCCTCTTGTT TGTGATTCTT TTCCTGAGCT AGTCCATTTT CTACCTCGAG 770

```

## (2) INFORMATION FOR SEQ ID NO:1360:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

```

GAATTCGGCC AAAGAGGCCT ACTCAGTGGG AACCTTTAAA CCCTAAAATC CAGGAAAAGA 60
AAATAAATAC ATTATCATGG ACCTGAGGGA TTTTACCTG TTGGCTGCTC TGATTGCTG 120
TTTAAGGCTG GATTCCGCAA TAGCTCAAGA ACTTATTTAC ACTATTAGAG AGGAATTGCC 180
TGAAAATGTG CCCATAGGAA ACATACCAA GGATCTGAAC ATTTCTCACA TCAATGCTGC 240
CACAGGGACC AGCGCCAGCC TTGTCTACAG ACTGGTTTCT AAAGCTGGGG ATGCCCTTT 300
GGTGAAAGTA TCCAGCAGCA CTGGGGAAAT TTTCACAACC TCCAACAGAA TAGACAGAGA 360
AAAACCTCTG GCTGGCGCCT CATATGCTGA GGAGAATGAG TGTTCCTTTG AACTTGAGST 420
GGTGATCCTC CCCAATGATT TCTTCAGGCT GATCAAATA AAAATAATTG TCAAGGATAC 480
CAATGATAAT GCCCCAATC TCGAG 505

```

## (2) INFORMATION FOR SEQ ID NO:1361:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

```

GAATTCGGCC AAAGAGGCCT AAATTGTTC TCTCCAAACC AGAAGACCTT AGGTACAGAT 60
GACCCCAAGG AGCTGGGACA GCAGGACAGA NAGGGGAAGG GACAGGTCCA TATATAGGTG 120
TGTCATTGCA GCCACTGCAA TGAACATAAC ATGCAAGAAA TGTACAGAAT GTGGTCCAGA 180
ATTGCCCCCT GGTGTCTGT GGCCTGGTGG ACCCCACAGA GGAAGTCCCC AGGCTTTCAC 240
TTTCCTTCCC CATGGATTGA GCAAGCTCCC AGGGCAGGAT GGGTGGCCAG GAGGGGCAGA 300
ACGCTGGCGG GGACGGGGAA GCCAAGTGCT CACAGGACCA TCCACCACAG CTGCAGCCAC 360
ACTGCAAGAC GGCGGGGATG GGACACACGG TCTAGTTCTT AGTTCTGCCT CCTACAGGCA 420
GCCCTGCTG TCACTCCAGA ACTAATTCTC TGTGTGCCAC TCACTCGCGT GTGTGACACA 480
CAACAGATAC ACATACATAG ACACATACGT ACATCTCCTC CCCCAATCTC ACCCTCTCAC 540
CAGGCCCTC GAG 553

```

## (2) INFORMATION FOR SEQ ID NO:1362:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 855 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

```

GAATTCGGCC AAAGAAGCCT AGTCAACTTG ATCCAAACCT GTTGGTGAAG CAGCAGACTC      60
CACCATCTCA GCAGCAGCCA CTCCATCAGC CAGCCATGAA GTCTTTCCTT GACAATGTCA      120
TGCCCCACAC TACACCTGAG CTGCAAAAAG GGCCATCACC AATAAATGCT TTCAGCAACT      180
TCCTTATAGG CTTGAACTCA AACTTGAATG TAAATATGGA TATGAACAGT ATTAAAGAGC      240
CACAGTCCAG ACTAAGGAAG TGGACGACAG TGGACAGCAT TTCTGTGAAC ACATCTTTGG      300
ATCAAACTC CAGCAAACAT GGTGCTATTT CAAGTGGTTT CAGGCTGGAA GAGTCTCCAT      360
TTGTNCCCTA TGACTTTATG AACAGCAGTA CTTCAACCAGC CAGTCCTCCA GGTCAATAG      420
GAGATGGCTG GCCACGTGCC AAATCGCCTA ACGGCTCTAG CAGTGTAAAT TGGCCACCAG      480
AATTTTCGTC CTGGTGAGCC ATGGAAAGGT TATCCAAACA TTGACCCTGA AACTGACCCT      540
TACGTCACTC CTGGCAGTGT CATAACAAT CTTTCAATTA ATACTGTGCG GGAAGTTGAC      600
CACCTCAGGG ACAGGAACAG TGGGTATCC TCATCCTTGA ACACCACGCT GCCTTCAACT      660
AGTGCCTGGT CATCCATTCG TGCCTCCAAC TACAACGTTT CCCTCAGCAG TACAGCACAA      720
AGCACTTCAG CCAGAAATAG TGATTCCAAA TTGACATGGT CTCCTGGTTC AGTTACAAAC      780
ACCTCTCTGG CTCATGAGCT GTGGAAGGTC CCTTTGCCAC CTA AAAACAT CACTGCTCCG      840
TCCCGCCACC TCAG

```

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 646 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

```

GAATTCGGCC AAAGAGGCCT AAAAAAGTA CATAGTAAGA CTAAGATACC AAGTTGTATA      60
CTAATATTTT TCAGGCCTTG GGCCTCAAAT ATATATATTT ATATATAATA CTCAGCTGTG      120
AACAGCAATT CGATGAAATG TAAATGTAT CTTTFTTTT TTAATCACA CACAAGTATT      180
CATAACCACA GGGTTCACCA GAAATCTAAA GCAAGGAGAC ACTCACTCAT ATAGAAATGG      240
AGTTACTCTT CCACAGATCG TTCTGATCAA AGGTTTGGGA ACAGAAATGA ATTAATGATT      300
TTTTTGTATA ATATCCAACA TGTCCTAT CAAATACATT TAGTATGAAA AAACAGATGA      360
AGAAAAGGAA CATACTTAG GACAAAGTAT CTGGTTAAAA TGCTGTTCAT TTAATAAAG      420
CCCACTCTCC TTACTTTAGA GTCCTTGGT GAAATGGAGG TGAGTTTGAT GGAGTGCACT      480
TGATGACCAC TGAAAACAC GAGCCCTTTC AACAATGTTG CAACACTGTT AGTTTTTGGT      540
TTAAACACAC ACACACACTC ACAAATGCTA AGTGTAACCT ACCAAATTCT GCGTTCAGCT      600
TTTCCAAGAA CTA CTG GGA AAGTTTCAAT GTCGCAATC CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

```

GAATTCGGCC TTCATGGCCT AATGGCTTAG CTGAAGGAAA TGCTCCAGAA ATTGGACTGT      60

```

```

GTAAACCATC AGTACAATAA TACGCTGTGT ATGTATGTGT ATATAAAATG AGAATTATGG 120
CATAATTGGA GCATTGGCAT TAATCAACAA ACTCACATTG AGACAAAACCT TAGTTTTACA 180
GCTGTCTTGA TTAAAGCCAA GTGTTCCATG TTGCTGTGAA GAATAGCCTC TTTCAAATAC 240
TTTGGAAGT AGTTACTTGG AACTTGTAA AGGTATTACA TTTTATATT TAAACACCTA 300
TAGAGATCTT CAATTCCCTG AGTCTGAGCT TGTGGGTGGA ATTCTAAATT TGTATCATAA 360
TCTGTCTTTT GTGAAACATT TTGAAAATAT GTATATATAA TATTGTATAT GCAAATTGTG 420
TTGTTTCACT TGTAAAGGGA AAAGGCTTAT TTTTCTTTAT ATTTCTGATA ACTTGTTTTG 480
CATATGACCG GCACTTCTCG AG 502

```

## (2) INFORMATION FOR SEQ ID NO:1365:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 197 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

```

GAATTCGGCC TTCATGGCCT ACAGAAGTAC GGAAGGCCA AGAAAAGAAT AGAGAAGATA 60
GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAAA GATAAATTTA AACCTGAAAA 120
GTAGGAAGCA GAAGAAAAAA GACAAGCTAG GAAACAAAAA GCTAAGGGCA TCGATTGAAT 180
TCTAGACCTG CCTCGAG 197

```

## (2) INFORMATION FOR SEQ ID NO:1366:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

```

GAATTCGGCC TTCATGGCCT AGGCCTGGGG TGGGACATTT TGTTTGTGAG AAGCCTGGAC 60
AAGAGGACGA GGTGCACACC ATGTCAGTCA CGGATTTGTG AACTCACAGG AGAGGGTTGG 120
ATAGGGCGTG TGAACGTGAG CCCGCGGTGT AGACGATGTG AAGCTGTGGT AACGGGTGGG 180
CTTGTGATGG CACCCGCTGC TCGCAGGAGA GGGTTGGATA GGGCATGTGA ACGTGAGCCT 240
GCAATGTAGA CGATGCGAAG TCGTGGAAC GGGTGGGCTT GTGACGGCAC CCGCTGCTTG 300
CAGCCTAACT CGAG 314

```

## (2) INFORMATION FOR SEQ ID NO:1367:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

```

GAATTCGGCC TTCATGGCCT ACTGGTCCCA TTTTCTATT GCAGTGGTCA TCATTTTAT 60
TGATGTATAA TAATATTGTA TCATAAATCT TCATAATATG TGCTTCCAAA GTTTTTTCTA 120

```

ATTTTCACT AACCTTIGAT TTGGTATTTA ATTTTATGTT GTCAGAAGTT TTTAATATT 180  
 GTATCATCAA AGCTATCAGG TTATTAAAT TGAATTCTCA TTTAGACATA CTTAGGCCAT 240  
 GAAGGTCGAG 250

## (2) INFORMATION FOR SEQ ID NO:1368:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

GAATTCGGCC TTCATGGCCT AGTGAGAGCA CCACACAAAG GACAGGAAAA ACACCAGCAA 60  
 TACATCAGCT TTACACAGCA GGCAAGTTTC CTGCTCTCTA CAAGTACAGA TGGAACTTGT 120  
 CTTGTGAATT AACATCCTGA CTACTTTTGT TGATCATCAC ATTTTTCCT CATGAGAGAA 180  
 ATAATAGTGT TTTATAGGCT CCTGAGAATA GGTTACTAA AGTCATCGAG ATCTGGGTTC 240  
 AATGACACT TCATGCTCGA G 261

## (2) INFORMATION FOR SEQ ID NO:1369:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

GAATTCGGCC TTCATGGCCT AGTTTTGTTT TGTGTTTGT TTTGTTTTTT GGCAAGAACA 60  
 GTTAGGAACC AGATCACAGT GAGGTATAGA GTGAATGAGA GTTGAGAATG TAAAGACAAT 120  
 GGATATAGAT CACTATTTCA GGAAGCTGTT TGTGAGAGGG AGGAGAAAAA TAAACAGTT 180  
 ACTGAGCAAT AGGGTGGTTG GTAAGGGGGA GGGATTTTTT TCTGAAAGAT GGGAGAAATT 240  
 TTAACATACT TAAATTTGAT GGGATAAGCC ATGCACTTAT AGGCATTTCAG TCAATATATA 300  
 TTTCAACAAT GAATGAAGAT AAATTAGGGA GAGTTAATT GGAGATTTTA GGAGAGAGGG 360  
 AATAATTGAT CATGTAAAGT CATTGATAAG GTGGGAGCAG AACTCGAG 408

## (2) INFORMATION FOR SEQ ID NO:1370:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

GAATTCGGCC TTCATGGCCT ACTCGATTAC AGGTCTCCCG CCTGCCATGC AGAAAGTCAT 60  
 GTATAAGGGA CTCGTCCCGG AGGATAAAAC ATTGAGAGAA ATAAAGTGA CCAGTGGGGC 120  
 CAAGATCATG GTGGTTGGCT CCACCATCAA TGATGTTTGA GCAGTAAACA CACCCAAAGA 180  
 TGCTGCGCAG CAGGATGCAA AGGCCGAAGA GAACAAGAAG GAGCCTCTCT GCAGGCAGAA 240  
 ACAACACAGG AAAGTGTGG ATAAAGGAAA ACCTGAAGAT GTGATGCCAT CTGTTAAGGG 300

GGCCCAGGAG CGCCTGCCAA CGGTACCGCT GTCCGGCATG TACAATAAAT CTGGAGGAAA 360  
AGTCTCGAG 369

## (2) INFORMATION FOR SEQ ID NO:1371:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTAACTG ATAGATGGTG CAGCATGTCT 60  
ACATGGTTGT TTGTTGCTAA ACTTTATATA ATGTGTGGTT TCAATTCAGC TTGAAAATA 120  
ATCTCACTAC ATGTAGCAGT ACATTATATG TACATTATAT GTAATGTTAG TATTTCTGCT 180  
TTGAATCCTT GATATTGCAA TGAATTCCT ACTTTATTAA ATGTATTTGA TATGCTAGTT 240  
ATTGTGTGCG ATTTAACTT TTTTGTCTTT CTCCTNNTT TTGGTTGTGC GCTTTCTTTT 300  
ACAACAAGCC TCTAGAAACA GATAGTTTCT GAGAATTACT GAGCTATGTT TGTAATGCAG 360  
ATGTACTTAG GGAGTATGTA AAATAATCAT TTAAACAAA GAAATAGATA TTTAAATTT 420  
AATACTAAT ATGGGATCTC GAG 443

## (2) INFORMATION FOR SEQ ID NO:1372:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 770 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

GAATTCGGCC AAAGAGGCCT ACTTCCGGCT GGAGCTGCTG GCGCGGGAC CTGGGGCGGT 60  
TAATTGGAG TGGCCCCGAG AGTCAGTTTC CTACACCATC CGAGGCCCCA CCCAGCACGA 120  
GCTACAGCCT CCACCAGGAG GGCCTGGAAC CCTCAGCCTG CACTTCCTCA ACCCTCAGGA 180  
AGCTCAGCGG TGGGCAGTCC TAGTCCGAGG TGCCACCGTG GAAGGACAGA ATGGCAGCAA 240  
GAGCAACTCA CCACCAGCCT TGGGCCCAGA AGCATGCCCT GTCTCCCTGC CCAGTCCCCC 300  
GGAAGCCTCC AACTCAAGG GCCCTCCACC TGAGGCAGAT CTTCTTAGGA GCCCTGGAAG 360  
CTTGACGGAG AGAGAAGAGC TGGCAGGGAG CCTGGCCCGG GCTATTGCAG GTGGAGACGA 420  
GAAGGGGGCA GCCCAAGTGG CAGCCGTCTT GGCACAGCAT CGTGTGGCCC TGAGTGTTC 480  
GCTTCAGGAG GCCTGCTTCC CACCTGGCCC CATCAGGCTG CAGGTCACAC TTGAAGACGC 540  
TGCCTCTGCC GCATCCGCCG CGTCTCTGTC ACACGTTGCC CTGCAGGTCC ACCCCACTG 600  
CACTGTTGCA GCTCTCCAGG AGCAGGTGTT CTCAGAGCTC GGTTCCTCCG CAGCCGTGCA 660  
ACGCTGGGTC ATCGGACGGT GCCTGTGTGT GCCTGAGCGC AGCCTTGCCT CTTACGGGGT 720  
TCGGCAGGAT GGGGACCCTG CTTTCTCTA CTTGCTGTCA GCTCCTCGAG 770

## (2) INFORMATION FOR SEQ ID NO:1373:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AGTCTCTTG  | AAGATCTCTA | GGAACCTGCT | TTATGAATCT | 60  |
| TCATGCTCCT | GTGTTGGATG | CATATACATT | TAGGATAGTT | AGGTGTTCTT | TTTGAATTGA | 120 |
| AACTTTTACC | ATTATGTAAT | GCCCTTGTTT | GTCTTTTAAA | ATTTTGTGTG | GTTTAATATC | 180 |
| TGTTTGTCT  | AAAATTAGAA | TTTCAGCCTC | TGCTTTTTTT | CTGTTTCCA  | TTTGCTTAAT | 240 |
| AAATTTTCT  | TCATTCCTT  | ATTTTAGCC  | TATGGGTGTC | ATTGGATGTG | AGATTCATCT | 300 |
| CTTGAACACT | GTAATACTGG | TTCTTGCTTT | TTTACTCAGC | TTGTCACTCT | GTGTCTTTCA | 360 |
| ATTGGGCATT | CAAGGCTAGT | GTGATATGT  | GTGAATTGT  | TTCTGTATC  | ATGTTATTAG | 420 |
| TTGTTTATTA | TGCTGACTTG | TTTGTGTGGT | TTTNTTATAG | TGTTACTGGT | CTGTGCACTT | 480 |
| AAGTGTGTTT | TTTGTAGTAC | AAATTTTCT  | TTTCATATGT | AGTGCTTTAT | GCGAGGTATT | 540 |
| TTGCAAGGAT | TTTCTGAATN | NTCNGAATTT | TTATGTGGGC | TAAACTAGGG | GCTCGAG    | 597 |

## (2) INFORMATION FOR SEQ ID NO:1374:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

|             |            |            |            |            |             |     |
|-------------|------------|------------|------------|------------|-------------|-----|
| GAATTCGGCC  | AAAGAGGCCT | AGCCTCCCAG | TGTGAGCCAC | CGCACCCAGC | CTGGATTGTT  | 60  |
| GAATTCATG   | CTGGGTCAC  | CTCCAGATTC | ATTTTCACAG | TCCTTCATGT | TTTGGTCATA  | 120 |
| TGACATTGTA  | TTTGTCTGCC | ATATGACTGA | TCTTTTTTTG | TAAATGTGA  | GATACTTGTT  | 180 |
| AAAAAATGTT  | TAGCAATGAA | TTGAGGCCTA | GTAGCATGTT | ATCTTGTCTG | AGAAGAGATG  | 240 |
| GGAGTCTACT  | TCTGGGGGAT | GGTCAGGGGT | CCTCCATACA | GGCTGCAATT | GAAGTCGTCTG | 300 |
| GTGCAGGCTC  | AGTCCCTACA | AAGGCCAGGG | TATTTCTGT  | CCACCTTTAT | TCTGATGCAT  | 360 |
| GACTCTTCTG  | GGTCTCAACC | AGAGCCAGTG | GACTTCAGTA | TGGGTGCGCT | TCATTGGCAG  | 420 |
| ACCCCTCAATC | CACTTGTTTT | CCATCTAATC | CCACTCGAG  |            |             | 459 |

## (2) INFORMATION FOR SEQ ID NO:1375:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AATGGATCTC | ATGTGCAAGA | AAATGAAGCA | CCTGTGGTTC | 60  |
| TTCTCCTG   | TGGTGGCGGC | TCCAGATGG  | GTCTGTCCC  | AGCTGCAGCT | GCGGGAGTCG | 120 |
| GGCCAGGAC  | TGGTGAAGCC | TTGGGAGACC | CTGTCCCTCA | CCTGCTCTGT | CTCTGGTGGC | 180 |
| TCCATCAGCA | GCAATAGTTA | CTCTGGGGC  | TGGATCCGCC | AGCCCCCAGG | GAGGGGGCTG | 240 |
| GAATGCATTG | GGAGCATCTC | TTACAGTGGG | AGCACCTACC | TCACCCCGTC | CCTCAAGAGT | 300 |
| CGAGTCACCG | TTTCCGTAGA | CCCGTCCAAG | AACCAATTAT | CCCTGAGGCT | GAGCTCTGTG | 360 |
| ACCGCCGAG  | ACACGGCTGT | GTATTATTGT | GCGGGGGGGT | CTCCGGGCGA | TTATTCTTAT | 420 |
| GAGAATAGTG | ATTACCCCGA | CCCCCGTAC  | TATTTAGACT | CCTGGGGCCG | GGGAACCTTG | 480 |
| GTCACCGTCT | CCTCAGCTTC | CACCAAGGGC | CCATCCGTCT | TCCCCCTCGA | G          | 531 |

## (2) INFORMATION FOR SEQ ID NO:1376:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

```

GAATTCGGCC AAAGAGGCCT AATGACTCAG AAGAAAGAAG TTA CTTTACC ATTTTGTGTT      60
ACACCATTTA AACTGCTTTC TGATTCCAAA CAGTTCAACA TTTTAAGAAA AGCAAGATCT      120
TATATAAAAC ACAGAAAGTT TGATGAAGTG GTCTCCCTTT GCAAGGAGCT AATTCATCTT      180
GCATTGAAAG GATTGTCCTA TTATCACACA TATGACAGAT TCTTTTGGG CGTCAATGTT      240
GTTATTGGTT TTGTGGGATG GATATCTTAT GCCTCTTTGT TGATCATCAA GTCTCATTCC      300
AACCTTATAA AAGGTGTTAG TAAAGAAGTG AAGAAACCAA GCCATCTCCT GCCTTGAGT      360
TTTGTAGCTA TTGGCATTTC AGTAGCATTTC TTTCTGCTGA TTCAAGCCTG TCCCTGGACA      420
TATTATGTAT ATGGTTTGTG GCCACTGCCA ATATGGTATG CGGTTCTAAG AGAATTTCAA      480
GTTATTCAAG ACCTTGTTGT ATCAGTGTG ACCTATCCTC TGAGCCATTG TGTGGGTAC      540
CTGTTAGCCT TTACCTGGG AATTGAAGTA TTAGTTCTCA GTTTTTCTA CCGCTATATG      600
CTTACCGCTG GACTTACTGC CTTGCGAGCT TGGCCATTTC TCACTCGGCT GTGGACTCGA      660
G

```

(2) INFORMATION FOR SEQ ID NO:1377:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 117 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

```

GAATTCGCGG CCGCGTCGAC AAAAAAGGTA AAGATGTTGC TGTATGCAAA ATGGACCCAA      60
GTTATGTTTA TTCAAGTTGC CTGTAGAAAC TTAGTGCTCT ATAGCCACAA ACTCGAG      117

```

(2) INFORMATION FOR SEQ ID NO:1378:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 118 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

```

GAATTCGCGG CCGCGTCGAC CTAAATTTA AACTGGCCT GGTTCGCTT TTTATCAAG      60
AGAGCTTAAC AGATAAAAAA TGAAATTAGT CTATTTTCTA CTGCCAGCA GTCTCGAG      118

```

(2) INFORMATION FOR SEQ ID NO:1379:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 229 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

|  |     |
|--|-----|
| GAATTCGCGG CCGCGTCGAC ATTTTATATA ATATTTTAAA TAAGTTGTG TACAAAACAA | 60  |
| AGATTGACT GCATTTTGAT TGTGACCCCG TTGCATGAAG TCAGGTGTGG AGTTTCCAC  | 120 |
| TTGTGGTATC ATGTTGCTGC TGCTCAAGAA GTTCTGATT TTGGAACATT TTGGATTTG  | 180 |
| GATTTTCACA TTGGGATAC CTAATGTGAG AGAGACTAGG CCACTCGAG             | 229 |

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

|   |     |
|---|-----|
| GAATTCGCGG CCGCGTCGAC GTTGGGGACA TGGTGGGTCT GAGAAAAGTG TTGCCCACAA | 60  |
| CTTCTATCT GGCATTCCT GCGGAGGAAA TAGAATGCGC GCTCTCCGAC AGCATTTCTT   | 120 |
| GTAACATCCG CGAACTCGAG   | 140 |

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 99 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

|  |    |
|--|----|
| GAATTCGCGG CCGCGTCGAC TCTCAGAAGA GGTGTGTTA ACTTCTATAA ATACAACCAC | 60 |
| TTCATGCGTT GGCATCTCCT TGAGAAAAGG CTTCTCGAG                       | 99 |

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGTTTAAGTG CTGTGGAGTA GTATATTCA CTGACTGGTT  | 60  |
| GGAAATGACA GAGATGGA CTGCTGCTGT GTTAGAGAAT TCCAGGATG               | 120 |
| TTCCAAACAG GCCCACCAGG AAGATCTCAG TGACCTTTAT CAAGAGGGTT GTGGGAAGAA | 180 |
| AATGTATTCC TTTTGTGAG GAACCAACA ACTGCAGGTG CTGAGGTTTC TGGGAATCTC   | 240 |
| CATTGGGGTG ACACAAATCC TGGCCATGAT TCTCACCATT ACTCTGCTCT GGGCTCTGTA | 300 |
| TTATGATAGA AGGGAGCCTG GGACAGACCA AATGATGTCC TTGAAGAATG ACAACTCTCA | 360 |

GCACCTGTCA TGTCCCTCAG TAGAACTGTT GAAACCAAGC CTGTCAAGAA TCTTTGAACA 420  
CACATCCATG GCAAACCTCG AG 442

## (2) INFORMATION FOR SEQ ID NO:1383:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 501 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

GAATTCGGCC AAAGAGGCCT ATTCAGGTGT TTTCATTGTTG TGATCAGGAC TGAACAGAGA 60  
 GAACTCACCA TGGAGTTTGG GCTGAGCTGG CTTTTTCTTG TGGCTATTTT AAAAGGTGTC 120  
 CAGTGTGAGG TGCAGCTGTT GGAGTCTGGG GGAGGTTTAA TACAGCCTGG GGGGTCCCTG 180  
 AGGCTCTCTT GTGCAGCCTC CGGGTTCATC TTTAGCAACT ATGCCGTGAG TTGGGTCCGC 240  
 CAGGCTCCAG GGAAGGGGCT GGAGTGGGTC TCAAGTATAA GTGACATTGG TGACACCAGA 300  
 TACTACGGAG ACTCCGTGAG GGGCCGATTC ACCATCTCCA GAGACAATTC CAAGAACATG 360  
 TTGTATTGTTG ACATGAACAG CCTGAGAGCC GAGGATACGG CCGTGTTATTA TTGTGCGGCA 420  
 AGGGATTGGT ATCATACTCG TGGCTATTAC TGGTACTACT TTGACTTCTG GGGCCAGGGA 480  
 TCCTTAGTCA GCGATCTCGA G 501

## (2) INFORMATION FOR SEQ ID NO:1384:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 634 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

GAATTCGGCC AAAGAGGCCT ACTTCAATAT TCTGTTACGG GTTTTTTTAG TCTTTTTTTC 60  
 TCTTTGCTTT CCTGTGTTGG AATTTTCTAT TTCTATATAC TCAAGTTCAG AGATTCTTTC 120  
 CTTTTCCATA TCCTGTCTAC TAGTGAGCCC ATCCAAGGCA TTGTTCAATT CTGTTACAGT 180  
 GTTTTGATCT TTAGTATTTC TTTTTCATTC TTCATTACAC TTTCTCTCTG CTAACATTGC 240  
 CCATAAGTGC TTATATGCTG TATACTTTAT CTGTTGATCA TATTTGTTTT AATTCCTTAA 300  
 TCTGATAATT CAACATCTCT GACATGTCGT GTTCTGGTTC TGATACTTGT TGTCAAACCTG 360  
 TGGTTTTTTT TCTTTTAGAG TGGCTTTTAA TTTTCTTTT GTTTTTTGT TTTTTTTTGG 420  
 ATAGTTGGAC ATGACGTACT AGATAAAAGC AACTACTGTA AATAGACCTT TAGGAATGTG 480  
 GTGGTAAGAT GTGAGAGGAA GAAAAGCATT CTGTAGTCCT GTTAGGTTTC AGTCTTTTAA 540  
 CCCATTTATG CTTAGTGTTT TATTACTGGA ACGCTAGGCA TGTGGAAGTT ATTTATATCC 600  
 TACTGCTAAA GGTATCACC AAGCTGTACT CGAG 634

## (2) INFORMATION FOR SEQ ID NO:1385:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 700 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

```

GAATTCGGCC AAAGAGGCCT ACTCAAGTTC AAGGAAAATG AAGACAAAAA GTGATATGAT      60
GGAAGAAAAC ATAGATACAA GTGCCCAAGC AGTTGCTCAA ACCAAGCAAG AAGCAGTTGT      120
TGAAGAAGAC TACAATGAAA ATGCTAAAAA TGGAGAAGCC AAAATTACAG AGGCACCAGC      180
TTCTGAAAAA GAAATTGTGG AAGTAAAAGA AGAAAAATATT GAAGATGCCA CAGAAAAGGG      240
AGGAGAAAAG AAAGAAGCAG TGGCAGCAGA AGTAAAAAAT GAAGAAGAAG ATCAGAAAAGA      300
AGATGAAGAA GATCAAAACG AAGAGAAAAG GGAAGCTGGA AAAGAAGACA AAGATGAAAA      360
AGGGGAAGAA GATGGAAGAG AGGATAAAAA TGGAAATGAG AAAGGAGAAG ATGCAAAAGA      420
GAAAGAAGAT GGAaaaaaaG GTGAAGACGG AAAAGGAAAT GGAGAAGATG GAAAAGAGAA      480
AGGAGAAGAT GAAAAAGAGG AAGAAGACAG AAAAGAAACA GGAGATGGAA AAGAGAATGA      540
AGATGGAaaa GAGAAGGGAG ATAAAAAAGA GGGGAAAGAT GTAAAAGTCA AAGAAGATGA      600
AAAAGAGAGA GAAGATGGAA AAGAAGATGA AGGTGGAAT GAGGAAGAAG CTGAAAAAGA      660
GAAAGAAGAT TTAAGAAGAG AGGAAGAAGG AAAGCTCGAG      700

```

## (2) INFORMATION FOR SEQ ID NO:1386:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

```

GAATTCGCGG CCGCGTCGAC CTTTAGTGTG TCTTTTCATT CTCTAAAAAG TGTCTTTGC      60
AGAGAAAAAA AAAATTTTAA TTTTGATGAA ATCCAACCTA TCAATTTTTC TTCTGTGGCC      120
CCTCGAG      127

```

## (2) INFORMATION FOR SEQ ID NO:1387:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

```

GAATTCGCGG CCGCGTCGAC CTCTGTTTCTG TCGTTTGTCT GAATATTTAT TAGCATTCCA      60
TCACTTTGTG TTAAATTAAT AGAAGTTGAG TTCAACAAT GTTTTAAAAA TTCACACAAA      120
TACTCGAG      128

```

## (2) INFORMATION FOR SEQ ID NO:1388:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 816 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

```

GAATTCGGCC AAAGAGGCCT AGTTTCTTTT GCTCTACATC TTCACCAGTA TTTGGTGTTA      60

```

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| TCAGTGTCT  | GAATTTTGT  | CATTCTGATA | GGTGTGTAGA | GGTATCTTAT | AATTTTAATT | 120 |
| TGTGTTTCT  | TGATGCCATA | TGATGTGTGG | GACATCTTTT | CATATGCTGA | ATTGCCATCT | 180 |
| GTATATCTTT | GGTGAGGTGT | CTGTTAAGGT | TGTTGGCCAA | TTTTTTAATT | GGGTTGTTTG | 240 |
| TTTTCTTGT  | GAATTTTAAG | AGTTCCTTAC | ACTGTCTCTG | TCTGTCTTGT | CTGTCTGTCT | 300 |
| GTCTGTCTGT | NGAGACAGAG | CCTCGCTCTG | TCACCCAGGT | TGCAGTACAG | TGGCACAGTC | 360 |
| TTGGCTCCCT | GCAACCTCTG | CCACCTGGGT | TCAAGTGATT | CTCCTGCGTC | AGCCTCCCGA | 420 |
| GTAGCTGGGT | TTATACCCGT | GCACCACCAC | ACCTGGCTAA | TTTTTGTATT | TTAGTAGAC  | 480 |
| ACGGGGTTTC | ACTANGTTAG | CCAGGCTGGT | CTCGACCTCC | TGACCTCAGG | TGATCCACCC | 540 |
| ACCTTGGCCT | CCCAAAGTGC | TGGGANGNGA | GCCACCACAC | CCAGCCTCCT | TACACATTTT | 600 |
| AGTTAATAGT | TCTTTATCAG | ATGTGTCTTA | TGTAAATATT | TCCTCCCTAT | CTGTGGCTTG | 660 |
| TCTTTTCATA | CTCTTGACAT | TGTCTTTTGC | AAAAGACAAC | AATTTTTAAG | AAACAAGTAG | 720 |
| ACAAATTTAA | TGAAGTCTGG | CTTATCAGTT | CTTTTCTTCA | TGGTTGGTAC | CTTTGGTGCC | 780 |
| GTATCTAAAA | GTCATACCA  | AACCAAGAA  | CTCGAG     |            |            | 816 |

## (2) INFORMATION FOR SEQ ID NO:1389:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | CTAAACCGTC | GATTGAATTC | TAGACGAACT | ATATGTTTAA | 60  |
| GCAAAAACAA | AAATAAAAT  | CCTCAAAAAA | AGTAATATCA | GAGTTTAAAT | TTCAACCAGC | 120 |
| TGGCACAACA | ATGAAAGTGT | CAGACTTTCT | GAAAGTACTC | GAG        |            | 163 |

## (2) INFORMATION FOR SEQ ID NO:1390:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTATGGCCT  | AAAACCTCA  | AAAATAAATT | AGAATCCAGC | ACTGCTACAA | 60  |
| TATATTATCT | AAAATGTCTA | ATTCTCAAAA | ATATGAGTGA | TGCAAAGAAA | CAGGAAACAG | 120 |
| TGAAACACAG | AGGAAAAAAC | AGTGACTAGA | AACTGACTTA | AGAGTAAGCC | CAGATGTATT | 180 |
| TGGGAGCCAG | AGCCTTCAAA | GAGCTATTA  | AATATGTTTG | AAAAAATTAA | GGGAAAATAT | 240 |
| GACAATGACT | CAAAAATAAG | GACTCTAAAT | ATAGAAATGG | GAGCTG     |            | 286 |

## (2) INFORMATION FOR SEQ ID NO:1391:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:

```

GAATTCGGCC TTCATGGCCT ACTTTTAAGG GCTTGGAGT TTCAAACCA CAGTCTGCAT      60
GTGACAGGTG CTCAGTGTG TTGGGTTGGC CGCTGGTTCT AGGCCTCTGC TGGAGTGTGT      120
GATCTGCTTT CTGACGGCAG GCGGTTTACA TGGGTGTGCT TTAATCTTAC GTCTCCGTCC      180
TCTTTTCCA CTGAGAGTGC TGGTCTCAAG GACAGTGGAG ATGAGAGAAT TGAATATCG      240
CATAATGTCT CATCTGTTT ATCTCTTGCT ACAAACATCA CAATCTCAAA ATAACAATGG      300
CAGTACAAC GCCACCTATA TCATTACTGA AACAGTGAA GATATTTTT GCCTAAGTCT      360
TCCCATCTG TGTAGTTATG CAGAGTCTCG AG                                     392

```

## (2) INFORMATION FOR SEQ ID NO:1392:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

```

GAATTCGGCC TTCATGGCCT AGTAATCTTT CCCCCAGTT TTTGGATGAA GAAACTAACA      60
CTGAAGGGGC GAGGTGGCCT CCCAGGCTCA GAGGGTGATT CAGAATCCAG GCCTGGTGT      120
CCTTCCACAG TACCAAAGCG CCACACATTA GTTGTCTTGT AGATTTTCCA CACTTCAGGG      180
AGAATGCCAA AGTATCTTTG CCTTGCACAC ACTACCTGTT CAACACTCAG TGACGAGGGT      240
GTCGTGTGTG CTCAGGCAAC TCCCGCCTT CTTCCTTTG CTCGAG                                     286

```

## (2) INFORMATION FOR SEQ ID NO:1393:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

```

GAATTCGGCC TTCATGGCCT ACTGAGTCT CAAATCTAAC GTTTTAGGAA TTTTATTC      60
CTGCAGAGAG TTGGGAGCT GTTTAAAGT TGGTTGGTTT AGCCAGTATA GCTAGATTCC      120
TCAAGGTCAA CACAACGCCA TACTGCTCTA GCTGGGGCTA GATTCTCAT GATAGTCTAA      180
ACTGTGTGAT GGCCAAGTCC CCACTTTGAA GATGTCCAAA TTCAGCCTCA GACATTCTC      240
CTCAAGAAAG GGGGGGCAAA AAAGCCTTTT GTGCCCCCTT CCCAAATTAT TTGCTCATGT      300
CGCAAGACTG AGTCTCGAG                                     320

```

## (2) INFORMATION FOR SEQ ID NO:1394:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 450 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

```

GAATTCGGCC TTCATGGCCT AACGCCATCT ACGACCTGAT CGAGCGCATC GAGGATTGG      60
CGCTGCAGAA CCAGATCCGG GAGCACGTCA TCTCCATCGA GGAATCGTTT GTGAACAGCC      120

```

```

AGGAGTGGAC GCTGAGCCGC TCCGTACCGG AGCTTAAAGT GGGCATAGTG GGGAACTGT 180
CTAGCGGGAA GTCAGCCCTG GTGCACCGCT ATCTGACGGG GACCTATGTC CAGGAGGAGT 240
CCCCGAAGG GGGGCGGTTT AAGAAGGAGA TTGTGGTGGA TGGCCAGAGT TACCTGCTGC 300
TGATCCGAGA TGAAGGAGGC CCCCTGAGC TCCAGTTTGC TGCCTGGGTG GATGCACTGG 360
TGTTTGTGTT CAGCCTGGAG GATGAAATCA GTTCCAGAC GGTGTACAAC TACTTCTGTC 420
GTCTCTGCAG CTTCGCAAC ACCCTCGAG 450

```

## (2) INFORMATION FOR SEQ ID NO:1395:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

```

GAATTCGGCC TTCATGGCCT ACCGTCATTC ATTGCAGGGA CCATCAAACC CCAGACAATC 60
CTATTTTGGT GGGAAATCTA GCAGATAGAG AAGCCAAACA AGTAGCCCTA CAACCTGTAC 120
AAGGCCAGTT TCTGTGCCTG TCCTCGTTCT CTCCTCTTTA CTCTCCAGAA GAAAAGGAGG 180
ACTACCAAGC CCAAACCTT CAAAACAAG GACCATGGTA TGTCAAGGAA GGGTGCTTCC 240
TTCTTCCTCA CTCTCAAACA ATCTATATCC TTCGAG 276

```

## (2) INFORMATION FOR SEQ ID NO:1396:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

```

GAATTCGGCC TTCATGGCCT AGGGGGCGGG GGGCGGGGCG GGTCTCAGAA ATCAGGAGTA 60
ACTCTTTGAA AACTAAATAG TTTAAATCT CATCCAACCT CCACCTAACT TACATGCCTG 120
GTTAACCGAC ACTCTGTATA TCCTGTATA AACATTCTAA CTGATGCCCA CGACATACTA 180
TTGGCTGATG GTTTTGCTAG TATACAGTAT GGCCACTTAC TGCCATTCCC ATGCCCTCGA 240
G 241

```

## (2) INFORMATION FOR SEQ ID NO:1397:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

```

GAATTCGGCC TTCATGGCCT AGAAAATGAA GAAGAAGATC ATCAAGGACC AGAAACTGCT 60
TGTGATCGTG GGGGGCATGC TGCTGATCGA CCTGTGTATC CTGATCTGCT GGCAGGCTGT 120
GGACCCCTTG CGAAGGACAG TGGAGAAGTA CAGCATGGAG CCGGACCCAG CAGGACGGGA 180
TATCTCCATC CGCCCTCTCC TGGAGCACTG TGAGAACACC CATATGACCA TCTGGCTTGG 240

```

CATCGTCTAT GCCTACAAGG GACTTCTCAT GTTGTTCCGGT TGTTCCTTAG CTTGGGAGAC 300  
CCGCAACTCT CGAG 314

## (2) INFORMATION FOR SEQ ID NO:1398:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 342 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCGGCC TTCATGGCCT AGTGACACACC AAGAACCAAG TTTCAGCTTG GTTACTGTGT 60  
 TGAAGACACC TTGCTATAT TTCAGTCAT TCCTTCTTTT CTCAATTTT TTTAATTGAC 120  
 AAAAAATTTA TATATCGTGT ACAACATCAA TCCATCTTGG CATCTGTATT TGTCAAGGTT 180  
 GTCTTAGAGG GACAGAATA ATAGGATATA TATAAGGGGG AGTTTATTA GTATTAACCT 240  
 ATATAATCAC AGGGTCCAC AACAGGCTGT CTGCAAGTTG AAGAGCAAGG AGAGCCAGTC 300  
 AGAGTGCCGA AACTGAAGAA CCTGGAGTCC GATGTTCTCG AG 342

## (2) INFORMATION FOR SEQ ID NO:1399:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 614 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCGGCC TTCATGGCCT AGGGCCATGT TGGTTAGAAT GGTGCCATAT TTTCTGGGAT 60  
 AGCACCATGC TGGCTGGGAT GGTGCCATGT TGGCTGGGAT GGCACCTGCC TCAGCCTCCC 120  
 AAATAGCTGG GATTACAGGC ATCTGCCACC ATGCCCTGGCT AATCTTTGC ATTTTATGTA 180  
 GAGAAGGGGT TTCGTCATGT TGTCAAGGCTG GTCTCTCACT CCTGAACCTCA GGTGATCCGC 240  
 CTGCCTCGGC CGCCCAAAGT GCTGGAATTA CAGGCATGAG CCGCCACGCC TGGCCTTTTA 300  
 CTTGAGTTT AATAGGATCG CTCTTGCTGC TATTGAGGAT AGTACATATG GGGTAATGAT 360  
 GCAAGCAGAG ACCTACTGTA GTACTCTTCA GGAGAGAATG GTGGCTTGCA CAAGGATGGA 420  
 AGCAATGAAG GTGGTGAATA GTGGTCAGTT TCTATATTTA TTAGGAAACA CCTAGGATGA 480  
 TATCTTAATA GACCAAAATG TGAAATGTAA GAAAAATAGA GATGTCAAGA TGACACAAAG 540  
 ATTTTGGCT TTGACAACTG AAAGAATAGT TACTATCAAC TGTGATTGGT AACAAATGCAC 600  
 ATGGATCTCT CGAG 614

## (2) INFORMATION FOR SEQ ID NO:1400:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 244 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCGGCC TTCATGGCCT AGTTCTATTT AAAAAATAAA CAACTAGACA ATTAAGTAGT 60

|  |     |
|--|-----|
| TTATTAACCT ATCACAATTG AATTTT TTTT TAATTTTCAG TCTTAACACA TTTTTTAAAA | 120 |
| TGTATTAAAG TAATACATTG TAGTAGTAGG ATTATATACT CCTTGGCTGA GAATTCCAAG  | 180 |
| TACTGTGGTT CTA CTGTTTA GTGGA AACT CTGGAAGTTA AAATATAGAA TATGAAACCT | 240 |
| CGAG   | 244 |

## (2) INFORMATION FOR SEQ ID NO:1401:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AAAACAAACA AAAAATTATC TGAATGATCC TGCTCTAAAA  | 60  |
| AAGAAGCCAC AGAAATGTTT AAAA ACTTCA TCGACTTAGC CTGAGTCATA ACGGTTAAGA | 120 |
| AAGCACTTAA ACAGAAGCAG AGGCTAATTC AGTGTCACAT GAGGAAGTAG CTGTCAGATG  | 180 |
| TCACATAATT ACTTTCTGTA TAGCTCAGAT TAGAATGGCT ACCCCATTCT CTAGACAAAA  | 240 |
| TCAAATTGTC CTATTGTGAC TCTTCTAAAA ATGAAGATGA AGAGCTATT TATGACACAC   | 300 |
| CTTGGATTAA AACGGGAAAC TCGAG  | 325 |

## (2) INFORMATION FOR SEQ ID NO:1402:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

|  |     |
|--|-----|
| GAATTCGGCC TTCATGGCCT AAAAGAAAAG AGAAAGTGTT ATTTTCCTGT TAGTGACATG  | 60  |
| TAGTCCCTTT GTTCTAGTAG GAAAAAAGGT GCCTAGAGGT AGTATATAGA GTAAATATTG  | 120 |
| TTCTTTTAGC CTA CTTCCTG CAGCTTCCAA TTTATCCAAG GAAATGTCTA CAACAATTTT | 180 |
| GTTCAAAAGT CTGTTCTAGT CAATAGCAGG AGAAGTCCAC GTTATTGGGC TGATTTTGCT  | 240 |
| TACATCAGCA AGAGAAATGT CACGTGATAC TCAGGCCGCG CTTTCTCTTC CATCACACCA  | 300 |
| TCTTCAAGGA ATGTCAATAA ACCCACTTTG GCTAGGCAGG ATTGAATTCT AGACCTGCCT  | 360 |
| CGAG   | 364 |

## (2) INFORMATION FOR SEQ ID NO:1403:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGTTAGGGAC TAACATTTGT ATCAACAGTT GATAAATGTC | 60  |
| TAAGATTGTT TATTATACAG CAGGGTACAA TGGTAGTGCT AATGCCAACA GGGCACCATG | 120 |
| GAAGTTAGTC TAAAAATTAT CGCTAGGCTT TATACAAGCA ACAACATATG CTGCTGCTCT | 180 |

TAGAATTTTG GGAAATGATC TGCTTCTAAT ACTAAGCAGT TCTTTAACAT TTTTAAATAT 240  
TGAATTCTAG ACCTGCCTCG AG 262

## (2) INFORMATION FOR SEQ ID NO:1404:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

GAATTCGGCC TTCATGGCCT AGCAATTGTC TTCAGTTTCC TTATGTTTGC CTTTCTCATC 60  
TGTGCTCTTT TCCATTTTAT TCCTACTCTG TCTCAGTCCA CTTACAGTTA TATTTCTCTAT 120  
CTGTGTATTT TATAATATTT GTGCTTTAAT ACTTTTAAAA TATCCTTTAT TTTACTGTTT 180  
CTTCTCTTCC CTGTGCATAT TTAAAGTGT TTTATTTCTC AGCCTTCTAT ATCTTTGCAT 240  
TAATTCGTGT CCTCTACAAT AGAGTCCGTT CCAAGCTTTC TGTCTTCCTG TGCCTTCCA 300  
CGGCTCTGGC TCTCTCTGCA TTATTTCTTA TTTATGGAAT ACAAATCTTT TACCCCTGTA 360  
TTTTTCTCAC TCCTCTCCAC ACACCCCGA CTCGAG 396

## (2) INFORMATION FOR SEQ ID NO:1405:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

GAATTCGGCC TTCATGGCCT AGACCAAAAT GTCTGCCCAG ATAAAGGATA CATTGTGCAT 60  
ACATACACTG GGGAGAGGCA GACAAAAA CAATGTAGTT TGAGTGTGTG TCGTGCTTG 120  
CATGCGTGCA TGCAGGCATG TGCATATATA ATGCTAAAAC ATGATAAGTA CTATTAAAAA 180  
AACAGGTTAG GGTGATTGAA ACTACTAGGG TATGAATAAG AGTGGGTTGC AATTTAAAGT 240  
AGGGTCATTG TGGTTGGCCT TATTGAGGTG ACATTGGAGT CAAGACTTGG AAGAAGAAAG 300  
GTTGTTGGCC ACACAGCTAT TGAGGGAAAA ATGTTCCAGA TAGAAGAAAC AGTCAGGGCA 360  
ATGCCTTGGG ATGGAATCAT GCATAGAGTA TTCACAGAAT AGCAAGGAAG CTCTAGTTCT 420  
AAAGTAAAGT GACTGAGACT CGAG 444

## (2) INFORMATION FOR SEQ ID NO:1406:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

GAATTCGGCC TTCATGGCCT ACCTAGAAGG TAGTAATGAT AAGCATTTAA TTAGAAGTAG 60  
GCCTGAAGTT TGCAGTGCAA TGCAAGTAAGT ATTTACCGAG TGATTCATAT GAGTAAGGAT 120  
GTGATAGCTG CTATAAGAGC TGCAAAGTTT ATTAAGATAC ATCCCTGTCC TGGAAACACT 180

|  |     |
|--|-----|
| GCCAGCTTCG ATGAGAATAC AACAAATGTTA GATATATTTCG TTTTGGGAAGA TACCTTTCCC | 240 |
| CCAGTTATTT TCATTTCACA GCTTCTCCAG CCTCCTTCAG CTTCTGTTCT CCCTCTTTGC    | 300 |
| TTTTCTGTCT CAATTTTCCT GCCCAGCCCT AAATTCACAG AGTAAATCCA CCAGAACCTC    | 360 |
| GAG  | 363 |

## (2) INFORMATION FOR SEQ ID NO:1407:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGGCTTCAGG GATAACCACG TTCAGGTGGG TTAGACACAC | 60  |
| CTCCTGTGGG AGGGTGATTG CAATTAGCTA TCATAAGGCA GGAGACACAA CAGCAACTTA | 120 |
| AATTATCCAC AAGCAGAATC ATGAGCTGTT TGCAAAGGGA GTTCCATCG CAAGACAGTT  | 180 |
| TCACTGTATT TAAGCGAGAT CCTGCCCTCG TACACGATCA CCGCTCGAG             | 229 |

## (2) INFORMATION FOR SEQ ID NO:1408:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AGGCTTCTAG AACAGAATG TAGGCAGGCT CCCAAATGGA  | 60  |
| GAGGTAAACA TGACCGCGTT GTTTGAACT ACTTCATTAA TTTGTAAATC AGAACCAAAA  | 120 |
| AGCTCTGGCC CTCCCACTTC TCTTAGCTGA CCCTCCTCCC CACTTACGGA TAAACAGACT | 180 |
| TTAACTTCCC TAACCCAGAA ACACTTCCAC CAAAAATGTA TGGTTATACC TTATCCTAAA | 240 |
| AAGGCACCAT GCAGGCATTT AAGACTGAAC CAGTGAATC TAAATATGTA GTAGTAGAAA  | 300 |
| ATATCACTAA TCAAACTTC CAGCATCAGA TGGTACAAAA CCCCAGAGG ACTGGTGACA   | 360 |
| TGTACCCCGG GATGGCAACC CCAGCTTCTG GCAACCCAC AGCCCAGCGG GAGCTTCAGC  | 420 |
| TCTGGTCAGG TGCACGGCTG CCAAAGTCTG CACACCTTG GGACAAGGAA AGGAGACACT  | 480 |
| TGCTTCATTG TGCTATTCAT GACCCAGTCG AG                               | 512 |

## (2) INFORMATION FOR SEQ ID NO:1409:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

|   |     |
|---|-----|
| GAATTCGGCC TTCATGGCCT AATGGATTAT ATTTCTATAA CAGTTAGAGT ACTATTCCAT | 60  |
| TTATCTCTTT CATTTTGAGT AAAGTTTGGT AGTTTAGGGA GGAATTGATC AATTTTCATC | 120 |
| AAATTGAAAG ATTCAGGTAC ATAAAGTTGT TGTTATATTA CTTATTATTC TTTTAATGTC | 180 |

TGTGGGGTCT AGTGATGTCT CCTCTTTCAG TTCTGATATT GGTAAATTTGT GTCTTCTCTC 240  
TTTTTGTGCC AGCATGCTCG AG 262

## (2) INFORMATION FOR SEQ ID NO:1410:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 441 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

GAATTCGGCC TTCATGGCCT AGGGAGGTGG TTTCTCTATC ATTGCATGAG GTAAGAGTCT 60  
 GGCCCTGGAT GCTAAGGCTG CAGTTTCTA CAGAAAGGAG TCATCTCTGT GAGGCAGCAT 120  
 CAGCCTCCAA GACACAGTG GCTGACCTGG TTTGTATAA AGATGAAAAC AGCTGTTCTC 180  
 AACTGGCTGA GGCCGGCCAC AGAGAGAGCG GCGGGCTCAG CCTTCACAGG ATTGTCCTTC 240  
 CACTAAAGGG TAGGGGGTTT TAATCATCGC AGAAAGGAAG TGGGGGTGAA GGTCAGGAAA 300  
 AATAGAAGCA CGAATTCACC CCTCAGGCCT CAGCTAGAGG AAGCTAAGAG AAGAAATGAG 360  
 ATTGCAATAC TGTTAAGAAA AAGGCAAAGC TGGAGAGAAT GCAGAGGATT CTGTTTCCTG 420  
 GAGAGAACCT TCAGACTCGA G 441

## (2) INFORMATION FOR SEQ ID NO:1411:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 479 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

GAATTCGGCC TTCATGGCCT AATTCATTGT CTGGTCCTTT ACAAAGACA TATGCTGGCT 60  
 CCTGCTCTCT GTGGATGATA GGTCTACAAA GATGTGATTC AACTCATATA TGCTCCAAA 120  
 TTTATATATT AATTCATATA CTGTTTGTG TTACATTAAT CTAGCATGTG CTTTGGCTT 180  
 GCTACTGCAG TAAGTTACCT TCTAATTCAT CATTAGGTCA ACTTTATCAA CTCACCTAAG 240  
 TCCAAAAGTA AATGTAGGTT TCTCCTGGGT TCTTTGCCT CTTAAGTTT GCCATCCCCA 300  
 AATAAGCACA ACAGAGACCT GCACCAAGAG ACCTTACTTT TAGACTGTAA GCACCAAAGT 360  
 GATTTCTGTA GAGAGAGTGA GCCAGGCTCA GTCTTATGAC TGGCAATACA AGTTGAGGGT 420  
 AGGAGCTTTG GACAGAACAC TAGCTATGTA TAGTGTGTC TAGGTGAGTG CTCTCGAG 479

## (2) INFORMATION FOR SEQ ID NO:1412:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 497 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

GAATTCGGCC TTCATGGCCT AGCCGATTTA TAAATATGTA TATATAACCT TTCCCTTTT 60  
 GAGAGATCTC TTAGTAATAG TCAAAGCCAT ACCCTATTCC TTAGTGAGAA AGCCAGTTTG 120

```

AAACGAATGT AGCAATAGAT GTAAAAACAT TTAAAGGCGT TTTAATGTGG CTTTTTAATG      180
AGCTGGGCTTA TGCCTGTAGT CCCAGCACAT TGGGCAGCTG AGCTGGGAGG ATCGCTTGAG      240
CCCGGGAGTT CAAGACTAGC CAGGGCAACA TAGTGAGACC CCATCTCTAT TTAAAAAATA      300
ATGTTTTTAA AGATAAGGAA CAGACTTAA GTGATGATTG ATTGCTCATA GAACGTTCAT      360
TTTGGGCTCC AGAACTAGGA ATGATGTAGA ATTTATTGTT GTGTCATTGT CTCATTAAAT      420
GCTGTAGTTT CCTATGTCCT TGCCTACCTT CTTTCCTCAG AGCCTCGCAT CTGACCCTCA      480
GAGAGTAGCA GCTCGAG                                         497

```

## (2) INFORMATION FOR SEQ ID NO:1413:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 439 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

```

GAATTCGGCC TTCATGGCCT ACAGGAACAA AAAATGCTAT GCTATTATCT CAAAAATGCA      60
TACTCCTTCC TACTTAAGAA TAATAAATTT ATATATTATG ATATGGTAAA ATTCACAAC      120
AATTGTATTT TTCCCTAGAA TGTTTAAAGC ATTATCTAAT ACCAGCTTCA GTGTCTATAT      180
TACTGTAACT TCATGAAAGA CTACTAACAA TACTGGCTAT CATTATTAA TATTAAGTAG      240
TACTTGCCAG ATGCCGTTAG AGGTGCTTTA AATGCATTCT CATTAGTCT TCGTGTGTAC      300
TACCGTTATC TTCACTTTTT AGATAAGGAG ACTAAAGTAT AACTAGAGCT AAGAAACATG      360
AGAAAGACGA CCTAGCTACT GCCTATTTTG TAATCCCAT GGAATAAGCT TGGAGAAGTA      420
AGAACTATTA CTACTCGAG                                         439

```

## (2) INFORMATION FOR SEQ ID NO:1414:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 243 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

```

GAATTCGGCC TTCATGGCCT AGCCACTTCA AGACGGCAAG TTATTTTAGC TCCTGTCTAA      60
ATAAGTTAGT GGGCTCCAGT CCTTAAACCA CTATTTTCTT TATTAATTCC TCAAGTACAG      120
ACTTTGTAT GTAACCAATC TTTTAAACC TGTGTATAAT GACTCATTAA TGAGTTGTAA      180
AATAAATGTA GTGAGTTATG ACCAATATAA AAAAATAGAA AAGGCCAGGC ACAGTCGCTC      240
GAG                                         243

```

## (2) INFORMATION FOR SEQ ID NO:1415:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:

```

GAATTCGGCC TTCATGGCCT AGTCTTCCAA GACAGGAATC AGCAACCTTT TTTTGTTTTT    60
CTGTATCAGT AATTCATTCT GTATATTTTA AAAAGTTTAA ACCTCTTCTT CCTAGCCCTC    120
CAGTATTGTG TTATAAATTA AAACGTTTCC CAAAGTGTTT TCTGTGAAAC AATAGTTCTA    180
AAAGGTGCTC TAAGAAAAGC TAAGTACATG GCAAAATCCA AAGTATATGT TTTATTCATT    240
ACATTTGATG AATTTTTTTT GTTTTTTCCT CTCGAG                                276

```

## (2) INFORMATION FOR SEQ ID NO:1416:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

```

GAATTCGGCC TTCATGGCCT AGAGAGCAGG TTTTAGCTTG CATCCAGCTG TTTCTTGAGT    60
GATGTGTACA GCTTACCCCC AAAGAGGCCAA CTGAATTTC GCTGCTCTAA TACCCACACC    120
CTCAACTTAG GTTTAGTCAT AATAAAAAAC AGAATGGATT TGTTAGTTCC ATTGATTGCC    180
ACAAACCTCA CCTTCTGTGT GGCAGAGATG TGCTTTAGTT CTTTATTGGA ATGTTACTTT    240
CAGATCTCAC AAACCTCAA CCTAGGGCAC CACCAATGAC AAAGAGAATG CTAATAGATG    300
AAATCCTTTG CCAGGTCTTC AAGCTTTCCA CTCCCCTCGA G                                341

```

## (2) INFORMATION FOR SEQ ID NO:1417:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

```

GAATTCGGCC AAAGAGGCCT AGCCATTATT ATTAAAAAGT AGGATTGCTA CCCGCCATTA    60
CTATTAATAA GTAGGATTGC TACCCGCCAT TATTATTAAA AAGTAGGATT GGTACCCGCC    120
ATTATTATTA AAAAGTAGGA TTGCTACCCA ACATTATTAT TAAAAAGTAG GATTGCTACC    180
CTCCATTATT ATTAAAAAGT AGGATTGCTA CCCTCCATTA TTATTAATAA GTAGGATTGC    240
TACCTGCCAT TATTATTAAA AAGTAGGATT GCTACCTGCC ATTATTATTA AAAAGTAGGA    300
TTGCTACCTG CCATTATTAT TAAAAAGTAG GATTGCTACC CGCCATTATT ATTAAAAAGT    360
AGGATTGCTA CCCGCCATTA TTATTAATAA GTAGGACTGC TACCCGCCGT TATTGCACA      420
GCTACCTTAT GAAAGTAGTT TCACGCTGTC TCGAG                                455

```

## (2) INFORMATION FOR SEQ ID NO:1418:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 573 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

```

GAATACCTAG CTTCCATGAT TTATGATAGA TATCCTTTAT TGGACCAATT CGTGTCTGTA    60

```

```

ACCAGCCTCC TGTTTCTACT GCCATCCCCT CCTCATGCAC AGATGCCTCC TCCCTTGGCT 120
CCTGCTCTGA TCCCTGTACC CAGCTTGTCCT CCTGCAAGCA TGTTCCCTCCT CCTTGCCCAG 180
GCTCTGACAC CCCACACATG TGTGGATCCC CTCCCCTGTC CCAGCTCTGA TACCCCTTGC 240
ATGTGTGGCT GCCCCTCACC TGGGTGTCCT CTTCCTGTC CCAGCTCTGA CACCCACGCA 300
TGTGGGGCTG CCCCCTGCCT AGGTGTCCCC TCCTCTGCTC AGGCTCTGTC CTCCTGCGGT 360
TGGCTTTCCC ATTCTGGATG CACCTCACAC ACAGCCTTGT CATCTTTGGA TGAATTTGGC 420
CTCCCCATC CACTGCTGGT GCAGATGCTT CTTACGGGG CCTTGCTGA TGGCTTTAGG 480
GCTGAATCAT GCAGGAAGGA AGGAGAAGGA CAAGAAGAAA AGGGAAGGCT GGGGAAGGAA 540
GCGGGTGGTA AAATTGGTTC ACAAGCCCTC GAG 573

```

## (2) INFORMATION FOR SEQ ID NO:1419:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

```

GAATTCGGCC AAAGAGGCCT ATTTTAAAAA AACTATTTA ATTTTAAAT TTATTTTGG 60
TTGTTTTTG CACAATGAAG TTTCAGCTTC TCAACCTTCT CCCCTACCCA GGGCTGTGGA 120
CCCAGACTGG CCTTGAGCCA CAGTCCCTCT TTCCTCCTC ACCCTCTTCC CCCTCCGGGC 180
ACCTCGAG 188

```

## (2) INFORMATION FOR SEQ ID NO:1420:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

```

GAATTCGGCC AAAGAGGCCT ACGAGGAAAG ATCTAATTAT CATGGACCTG CGACAGTTTC 60
TTATGTGCCT GTCCCTGTGC ACAGCCTTTG CCTTGAGCAA ACCACAGAA AAGAAGGACC 120
GTGTACATCA TGAGCCTCAG CTCAGTGACA AGGTTACAA TGATGCTCAG AGTTTGTATT 180
ATGACCATGA TGCCTTCTTG GGTGCTGAAG AAGCAAAGAC CTTTGATCAG CTGACACCAG 240
AAGAGAGCAA GGAAAGGCTT GGAAAGATTG TAAGTAAAT AGATGGCGAC AAGGACGGGT 300
TTGTCACTGT GGATGAGCTC AAAGACTGGA TTAATTTGC ACAAAAGCGC TGGATTTACG 360
AGGATGTAGA GCGACAGTGG AAGGGGCATG ACCTCAATGA GGACGGCTC GTTTCCTGGG 420
AGGAGTATAA AAATGCCACC TACGGCTACG TTTTAGATGA TCCAGATCCT GATGATGGAT 480
TTAACTATAA ACAGATGATG GTTAGAGATG AGCGGAGGTT TAAATGGCA GACAAGGATG 540
GAGACCTCAT TGCCACCAAG GAGGCTCTCG AG 572

```

## (2) INFORMATION FOR SEQ ID NO:1421:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GCAAGACGGC | TACTGAGGCA | GGAGAATCGC | TTGAACCCAG | GAAGCGGAGG | TTGCAATGTG | 60  |
| CCAAGATCGT | GCCACTGCAC | ACTCTAGCCT | GGGCAACAGA | GCAAGACTGT | GTCTCAAAAA | 120 |
| AAAAAATCT  | TNGACNAAAC | ATAGTTGTTN | ACATACTTCT | TTAATCCCAG | AGTTAGTTTT | 180 |
| AAAAANNACA | TGATTGCTGT | TTTTGCATAT | TATCTCAGCG | GTCTAAAAAT | AACCTAGCCA | 240 |
| TGTGCAGGAA | TGGGTAAAGT | CCCCTTAAAC | AAAAATGGGG | TTAGTTANGT | TAGTTCTTTT | 300 |
| GCCATTTTAC | TGGTCATATA | CCTGAAGCGC | TTAGCCTGAC | ACAATTGAAC | GCCAGACGGA | 360 |
| AGCCGNGATC | AGCGGTCCTG | ACGGGGGTCA | GAGTCAGACC | AGGGGTCTTT | TACCCAAGTG | 420 |
| GGGAAGATTG | GGAAAGGCCT | AGGATCAGAG | AGGGAAATGG | GTCCCTGGTT | GCCCATGGAC | 480 |
| CTAATGGGGT | CTCTCGAG   |            |            |            |            | 498 |

## (2) INFORMATION FOR SEQ ID NO:1422:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 827 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

|            |             |            |             |            |            |     |
|------------|-------------|------------|-------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC  | GAGGAAACCA | GCCAAGGACT  | AACTACGACC | ATGAGATTGG | 60  |
| CAGTGATTGG | CTTTTGCCCTG | TTTGGCATTG | CCTCCTCCCT  | CCCGGTGAAA | GTGACTGATT | 120 |
| CTGGCAGCTC | AGAGGAGAAG  | CTTTACAGCC | TGCACCCAGA  | TCCTATAGCC | ACATGGCTGG | 180 |
| TGCCTGACCC | ATCTCAGAAG  | CAGAACTCTC | TTGCGCCACA  | GAATGCTGTG | TCCTCTGAAG | 240 |
| AAAAGGATGA | CTTTAAGCAA  | GAAACTCTTC | CAAGCAATTC  | CAATGAAAGC | CATGACCACA | 300 |
| TGGACGACGA | TGATGACGAT  | GATGATGACG | ATGGAGACCA  | TGCAGAGAGC | GAGGATTCTG | 360 |
| TGGACTCGGA | TGAATCTGAC  | GAATCTCACC | ATTCCGGATGA | GTCTGATGAG | ACCGTCACTG | 420 |
| CTAGTACACA | AGCAGACACT  | TTCACCTCAA | TCGTCCCTAC  | AGTCGATGTC | CCCAACGGCC | 480 |
| GAGGTGATAG | CTTGGCTTAT  | GGACTGAGGT | CAAAGTCTAG  | GAGTTTCCAG | GTTTCTGATG | 540 |
| AACAGTATCC | TGATGCCACA  | GATGAGGACC | TCACCTCTCA  | CATGAAGAGC | GGTGAGTCTA | 600 |
| AGGAGTCCCT | CGATGTCATC  | CCTGTGCCCC | AGCTTCTGAG  | CATGCCCTCT | GATCAGGACA | 660 |
| ACAACGGAAA | GGGCAGCCAT  | GAGTCAAGTC | AGCTGGATGA  | ACCAAGTCTG | GAAACACACA | 720 |
| GACTTGAGCA | TTCCAAAGAG  | AGCCAGGAGA | GTGCCGATCA  | GTCCGATGTG | ATCGTAGTGC | 780 |
| AAGCAAGTTC | CAAAGCCAGC  | CTGGAACATC | AGAGCCACGG  | CCTCGAG    |            | 827 |

## (2) INFORMATION FOR SEQ ID NO:1423:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | GGGAGAGGAA | GGGTGGGCA  | GGATGGAATA  | TTAAATTGTA | 60  |
| ACATGATAAA | CATGCAAGAC | TGTTATCCAA | TCTAGATAAT | TTATATACAT  | TTTGATGACT | 120 |
| TAGGAAAACA | AAGCAATCAT | TTGTGACAAG | CCTAAAAAGC | TTGACATATT  | TAACATACTT | 180 |
| AGGAACTTTT | TTTGTGCGGT | GGGAATTCTC | TAATTGTATC | ATGTGGGCCT  | TTTGAAAGTA | 240 |
| ACAAACAGAA | GGCCAGTCTG | TTGCAAGTTT | GCTGCTGAAC | ATCACAATTCC | ACCCTAAGAA | 300 |
| AACACAAGGT | GGATTGCATC | GAGGGTGGAT | ACCTTACCTT | AGCACAGA    |            | 348 |

## (2) INFORMATION FOR SEQ ID NO:1424:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

|  |     |
|--|-----|
| GAATTCGCGG CCGCGTCGAC TTGAGAATG TGGCCTCTGA TCACTAACCA GGGTTTTCTC | 60  |
| TTTAACTGG CTGTTTACT TATTCTTCA CCAAAGCCAG GGAACGTCCC TTTAGCTACT   | 120 |
| GCAGCATTTC TAACAGATGC GACAAATCAC AG                              | 152 |

## (2) INFORMATION FOR SEQ ID NO:1425:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

|   |     |
|---|-----|
| GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTA GACCTGCCTC GAGATGCGCC | 60  |
| ACTTTCTGCT CACCCACCTT AGAGCCTTGT CATATGCAGT TGCTTCCTCA GAGTATTGCC | 120 |
| ATCCCCAGCA CGACCCCGAG CTCATTCTTC AGGCCACTAA CGTAAATGTT ACTTCTCAA  | 180 |
| AAACACCCTC TCCATCCCGG CACCCA                                      | 206 |

## (2) INFORMATION FOR SEQ ID NO:1426:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

|   |     |
|---|-----|
| GAATTCGCGG CCGCGTCGAC GTGGGTACTT CATCCTCCTC ATCACTGGTT GGCAGTGAGA | 60  |
| GCTTCTTAAG ACGCTCCATG AGCTCTTTCT CTCTCCATC ATCATCCACA TCCTTCTTCC  | 120 |
| GCCTGCCTTT TCGGGTATCT CGCTTTTTTT TTTGCTGCTG TTGCTGTTGC TGCTGCTGCT | 180 |
| GCTCCTTCTC CTTGAGCACT TTCTCTTCTT CCCCAGCCTG TTTATCTTCT ACTGCCAGCT | 240 |
| CTTCAAAGAA CGTTTTTTTG ATCTTCTNGT CCTTCTTCCC TTTCTTCACC ACTTTGTCTG | 300 |
| ATGGGCTCGT GCTCTCTCCG TCCCCGATCC ACTCGGGCTC CGGCGGACTC GAG        | 353 |

## (2) INFORMATION FOR SEQ ID NO:1427:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | AGATATTTGG | TTATCTTGAC | TTTTTAAAT  | AACATATTC  | 60  |
| TACAGGATTT | TGAGTCTGAG | AAGAGAAAGG | TAATATGCAA | GACACTTCGA | TTGTGTCAC  | 120 |
| ATTATTATGG | AGCATCATTA | ATGGTTTGTA | CATTCTTGTT | CCTTTGGGCT | TGAATGGACA | 180 |
| GTACCAAATT | TGGGGAAATC | AGCAACTTGA | TGCACAGCTA | CGAGGAATAA | ATGCTTTTGC | 240 |
| TAATGCACAT | GGTCCCGTTG | CTTTCCCACT | GCTGAAGACC | TCTCCTTACA | GAGTGGTTGA | 300 |
| TAATGCATCT | GTTGAACATG | CACTGCTAGA | TGGTCCTCTC | GAG        |            | 343 |

## (2) INFORMATION FOR SEQ ID NO:1428:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | GAGGGGAAGA | TGTCACGCAA | GATAGAAGGC | TTTTTGTAT  | 60  |
| TACTTCTCTT | TGGCTATGAA | GCCACATTGG | GATTATCGTC | TACCGAGGAT | GAAGGCGAGG | 120 |
| ACCCCTGGTA | CCAAAAGCA  | TGCAAGTGCG | ATTGCCAAGG | AGGACCCAAT | GCTCTGTGGT | 180 |
| CTGCAGGTGC | CACCTCCTTG | GACTGTATAC | CAGAATGCCC | ATATCACAAG | CCTCTGGGTT | 240 |
| TCGAGTCAGG | GGAGGTCACA | CCGGACCAGA | TCACCTGCTC | TAACCCGGAG | CAGTATGTGG | 300 |
| GCTGGTATTC | TTCGTGGACT | GCAAACAAGG | CCCGGCTCAA | CAGTCAAGGC | TTGGGTGTG  | 360 |
| CCTGGCTCTC | CAAGTTCCAG | GACAGTAGCC | AGTGGTTACA | GATAGATCTG | AAGGAGATCA | 420 |
| AAGTGATTTT | AGGGATCCTC | ACCCAGGGGC | GCTGTGACAT | CGATGAGTGG | ATGACCAAGT | 480 |
| ACAGCGTGCA | GTACAGGACC | GATGAGCGCC | TGAAGTGGAT | TTACTACAAG | GACACTCTCG | 540 |
| AG         |            |            |            |            |            | 542 |

## (2) INFORMATION FOR SEQ ID NO:1429:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

|            |            |            |             |            |            |     |
|------------|------------|------------|-------------|------------|------------|-----|
| GAATTCGCGG | CCGCGTCGAC | TTAAGAGTCT | GCTTCGGAGA  | CCGTAAGGAT | ATTGATGACC | 60  |
| ATGAGATCCC | TGCTCAGAAC | CCCCTTCCTG | TGTGGCCTGC  | TCTGGGCCTT | TTGTGCCCCA | 120 |
| GGCGCCAGGG | CTGAGGAGCC | TGCAGCCAGC | TTCTCCCAAC  | CCGGCAGCAT | GGGCCTGGAT | 180 |
| AAGAACACAG | TGCACGACCA | AGAGCATATC | ATGGAGCATC  | TAGAAGGTGT | CATCAACAAA | 240 |
| CCAGAGGCGG | AGATGTCGCC | ACAAGAATTG | CAGCTCCATT  | ACTTCAAAAT | GCATGATTAT | 300 |
| GATGGCAATA | ATTGCTTGA  | TGGCTTAGAA | CTCTCCACAG  | CCATCACTCA | TGTCCATAAG | 360 |
| GAGGAAGGGA | GTGAACAGGC | ACCACTAATG | AGTGAAGATG  | AACTGATTAA | CATAATAGAT | 420 |
| GGTGTTTTGA | GAGATGATGA | CAAGAACAAT | GATGGCATACT | TCGAG      |            | 465 |

## (2) INFORMATION FOR SEQ ID NO:1430:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

|             |             |             |            |            |            |     |
|-------------|-------------|-------------|------------|------------|------------|-----|
| GAATTCGGCG  | CCGCGTCGAC  | GCTGTTTCATG | AGGAGACTTA | ACCACAATTC | AAAGTGTAGC | 60  |
| AGTTGTGTAT  | TTAGCATTAA  | TAATATTGGA  | TTGAGGCCCT | GAGGTGTTAA | TATCTCAATC | 120 |
| TCAGAGTTAG  | ATGTTTCATGT | CCTTTTGTAA  | TTTTTTAAAC | ATTTTTCATA | ATTTTTTTTT | 180 |
| TAAAGTTAGGG | AGCACATTGA  | GTGAAGTTCT  | CTGTGTAGAA | CAATACCTTC | TGCTCTGCTT | 240 |
| CTCCAGCTT   | TCCTGAGGG   | CTGGAAAAGG  | ACAGGCCTGT | CCAGCTGTAC | TGTCCCACTG | 300 |
| TGTATGGGGA  | AGCTCAGGCT  | CTGGTGAAG   | CAGGGGGCAT | GGATGTCAAA | CAACTGATGT | 360 |
| GCAAACACTC  | GAG         |             |            |            |            | 373 |

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 632 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACTACTGATG | AGAACATTAT | CTGCATATGC | CAAAAAATTT | 60  |
| TAAGCAAATG | AAAGCTACCA | ATTTAAAGTT | ACGGAATCTA | CCATTTTAAA | GTTAATTGCT | 120 |
| TGTCAAGCTA | TAACCACAAA | AATAATGAAT | TGATGAGAAA | TACAATGAAG | AGGCAATGTC | 180 |
| CATCTCAAAA | TACTGCTTTT | ACAAAAGCAG | AATAAAAGCG | AAAAGAAATG | AAAATGTTAC | 240 |
| ACTACATTAA | TCCTGGAATA | AAAGAAGCCG | AAATAAATGA | GAGATGAGTT | GGGATCAAGT | 300 |
| GGATTGAGGA | GGCTGTGCTG | TGTGCCAATG | TTTCGTTTGC | CTCAGACAGG | TATCTCTTCG | 360 |
| TTATCAGAAG | AGTTGCTTCA | TTTCATCTGG | GAGCAGAAAA | CAGCAGGCAG | CTGTTAACAG | 420 |
| ATAAGTTTAA | CTTGCATCTG | CAGTATTGCA | TGTTAGGGAT | AAGTGCTTAT | TTTTAAGAGC | 480 |
| TGTGGAGTTC | TTAAATATCA | ACCATGGCAC | TTTCTCCTGA | CCCCTTCCCT | AGGGGATTTT | 540 |
| AGGATTGAGA | AATTTTTCCT | TCGAGCCTTT | TTAAAATTGT | AGGACTTGTT | CCTGTGGGCT | 600 |
| TCAGTGATGG | GATAGTACAC | TTTTCACCTG | AG         |            |            | 632 |

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACTAATTTC  | AAGAGCTAAA | CTTTATACCG | CCTGCAATAT | 60  |
| TTCCATTTAC | TACCAAGTTT | TTTCTGACCT | AGTCAGATAT | AAGAAGCCCC | CTTACTGGAT | 120 |
| ACAAGACAGT | TAATTATCAG | ATCCAGTCTG | ATCCTAGATC | CAGTCTGATC | CTAGACCCAG | 180 |
| TCCAGTTTCT | GTTGTGACTT | CCAAACCCAG | TTTGGATCAG | AAATTTGCTC | AAAGAAACTA | 240 |
| GGAGAGCTCA | AAACACAAAT | ATGTGGAGCT | TCTGAATCTG | AGAGAGAACG | AACTCGAG   | 298 |

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 335 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GGGTGGTTTC | ACCTTGTGG  | CCAGGCTAGT | CTTGAAGTCC | TGACCTCAGG | TGATCCACCC | 60  |
| ACCTCGGCCT | TCCAAAGTGC | TGGGATTACA | GGCATGAGCC | ACCGCATCTG | ACTGGTGCAC | 120 |
| TTTACTTTGA | CCTGTCATAA | ATCCCTTGGT | TGTTTATTAC | TAGTTTTTAC | TTTAGACAGC | 180 |
| AATTATCTTT | CAAGGAAAAA | TTTAAAAGGA | AAAAATGTCT | TATATTTACC | CTCATGTTTA | 240 |
| CCATTCCCAG | TGCTCTTTAT | TTCTTTATGT | CAATCCGGAT | TTCAATTGT  | TATCATACTG | 300 |
| TTTCTGCCTG | AATAACAGTT | TAACAGCAAC | TCGAG      |            |            | 335 |

(2) INFORMATION FOR SEQ ID NO:1434:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 316 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTTATGGCCT | AATGCTCTGT | GTCAGTGTCT | CCCGGTGCTC | AGCACAGACA | 60  |
| AGTTCAAGAC | AGATTTTAT  | GATCAATGCA | ACGACGTGGG | GCTCATGGCC | TACCTCGGCA | 120 |
| CCATCACCAA | AACGTGCAAC | ACCATGAACC | AGTTTGTGAA | CAAGTTCAAT | GTCCTCTACG | 180 |
| ACCGACAAGG | CATCGGCAGG | AGAATGCGCG | GGCTCTTTT  | CTGATGAGGG | TACTTGAAGG | 240 |
| GCTGATGGAC | AGGGGTCAGG | CAACTATCCC | AAAGGGGAGG | GCACTACACT | TCCTTGAGAG | 300 |
| AAACCACTGT | CTCGAG     |            |            |            |            | 316 |

(2) INFORMATION FOR SEQ ID NO:1435:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 383 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCTAGA | CCTCCACCC  | TGTAGAACAT | TCTCCTCACT | TAGGAGATAG | TCATATTTTC | 60  |
| AGGCTGCCTT | TGAAACTGTG | GGTACACAAA | CAGCAGAGCG | ATCTATTTCA | GCAGTTGAAG | 120 |
| TTGTATTGGA | GCCATTATTT | CTTCCACTCT | CTTTTGGTT  | GAGTTTCTAG | GAAGGAAAGG | 180 |
| GCTGAACTCC | ATGACTGCTC | ATATTACAGT | GCTAAGTCCT | CACAGCCATC | CACGTGTTAT | 240 |
| ACACAAGAAG | AACTAGGCC  | CACCAAGAGT | AAGCGCCTGC | CTGAGGTCCG | TGAGTGAGTA | 300 |
| AGGGCCAAAG | GTGAGTTGG  | GATCTGGCCC | TTTCTCTTTT | CTGGCCACCA | CAGGGCACTA | 360 |
| CCTCCATAC  | CCACACACTC | GAG        |            |            |            | 383 |

(2) INFORMATION FOR SEQ ID NO:1436:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

```

GGAGAACTGC TAAGGTCCAC AACGTCGACA ATTGAAAGCT TTGCTGCACA AGAAAAACAA      60
ATGGAAGTTT GTGAAGTATG TGGAGCCTTT TTAATAGTAG GAGATGCCCA GTCCCGGGTA      120
GATGACCATT TGATGGGAAA ACAACACATG GGCTATGCCA AAATTAAAGC TACTGTAGAA      180
GAATTAAAAG AAAAGTTAAG GAAAAGAACC GAAGAACCTG ATCGTGATGA GCGTCTAAAA      240
AAGGAGAAGC AAGAAAGAGA AGAAAGAGAA AAAGAACGGG AGAGAGAAAG GAAAGAACTC      300
GAG                                                                    303

```

(2) INFORMATION FOR SEQ ID NO:1437:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 228 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

```

GAATTCGGCC TTCATGGCCT AGACTTTTAC ACATTTTAT TAGCTACCTG GAATTATTTT      60
TGTAACACGT TAAGTGTAAG TAAACAAATA ATGCTTTGCT TTTTGTTC TGGAATTATT      120
TTGTATTTTC TTGCGCAAAT GCATATATCT TCAGGTCTTT TTTTATAAC CATATGCATA      180
CCAAGGCACC ATTCCATTGA CTTTCCAAC TCTGTCCCAA CCTCTGAG                228

```

(2) INFORMATION FOR SEQ ID NO:1438:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 498 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

```

GTGAATTCCA GTCCCCACCC AGAAACCCGC AGCATGATTG TCTGCCTCCT TTTCATGATG      60
ATTTTATGCG CAAAGGAAGT TCAACTGGTA GACCAAACAG ATTCACCTTT ACTTAGTCTC      120
CTTGGACAGA CAAGCTCACT TTCATGGCAT CTTGTGGATA TTGTGTCGTA CCAGAGTGTG      180
CTAAGTTATT TCAGCAGCCA TTACCCGCCG TCCATCATCC TGGCAAAAGA ATCTTATGCT      240
GAATTAATCA TGAAGTCCT AAAAGTGTCT GCGGGCCTTT CTATTCTTAC TGACAGCCAG      300
AAGCATCTTG ATGCAGTTCC AAAATGCCAA GCTTTTACTC ATCAGATGGT TCAATTCCTC      360
AGCACCTTGG AACAAAATGG AAAAATCACC TTAGCAGTCC TAGAACAGGA AATGTCTAAG      420
CTCTTAGACG ATATCATGT CTTTAACCCG CCCGACATGG ACAGCCAGAC CCGCCACATG      480
GCCCTCAGCG GTCTCGAG                                                                    498

```

(2) INFORMATION FOR SEQ ID NO:1439:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 314 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AGCAGGGAGA | GGGGTTCTGT | GCTCCTGAGA | TTAGTTCAGA | 60  |
| TGGTCTAACC | ATTGTTCTAT | ATGTGCATTT | TAGTTAATAT | TGTGTATTAA | AGGATAAGTC | 120 |
| TTAATGCTCA | AAGTATGTTA | AAAATAGATG | TAGTAAATCA | GTCCCTTTGT | GAATGTCCTT | 180 |
| TTGTTAGTTT | TTAGGAAGGC | CTGTCCTCTG | GGAGTGACCT | TTATTAGTCC | ACCCCTTGGA | 240 |
| GCTAGACATC | CTGTACTTAG | TCACGGGGAT | GGTGAAGAG  | GGAGAAGAGG | AAGGGTGAAG | 300 |
| GGAAGTGGCT | CGAG       |            |            |            |            | 314 |

(2) INFORMATION FOR SEQ ID NO:1440:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 424 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| CCAGCCGTCT | GCAGCTCCGG | CCGCCACTTG | CGCCTCTCCA | GCCTCCGAG  | GCCCAACCGC | 60  |
| CGCCAGCACC | ATGGCCAGCA | CCATTTCCGC | CTACAAGGAG | AAGATGAAGG | AGCTGTCGGT | 120 |
| GCTGTCGCTC | ATCTGCTCCT | GCTTCTACAC | ACAGCCGCAC | CCCAATACCG | TCTACCAGTA | 180 |
| CGGGGACATG | GAGGTGAAGC | AGCTGGACAA | GCGGGCCTCA | GGCCAGAGCT | TCGAGGTGAT | 240 |
| CCTCAAGTCC | CCTTCTGACC | TGTCCTCAGA | GAGCCCTATG | CTCTCCTCCC | CACCCAAGAA | 300 |
| GAAGGACACC | TCCCTGGAGG | AGCTGCAAAA | GCGGCTGGAG | GCAGCCGAGG | AGCGGAGGAA | 360 |
| GACGCAGGAG | GCGCAGGTGC | TGAAGCAGCT | GGCGGAGCGG | CGCGAGCACG | AGCGCGGGCT | 420 |
| CGAG       |            |            |            |            |            | 424 |

(2) INFORMATION FOR SEQ ID NO:1441:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 346 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ATAGGCCATG | AAGGCCGGCC | TTCATGGCCT | AGTCAGGCTT | 60  |
| AAGTTTAATA | AATAGCAAAT | TGCATACAGA | TATTTACAAT | GATCGAAAGA | CAAACAGAGG | 120 |
| TCCTATCCGT | GCAGTCCCAA | CAATAAAGAC | AGGCATTGGC | ATAAAGT3TT | TATAAATTCT | 180 |
| TGGGTACAGC | TGTTCTGAAA | GTAAAGTTCA | CTTTCAATCC | TAAAAAAGT  | CCGCTATTCC | 240 |
| TCCCTGGCTG | CTCTGGACTG | TCCTCATCCT | CTTTAGCTGC | TGTTGCGCCT | TCCGCCACCG | 300 |
| ACGAGCTAAA | CTCAGGCTGC | AACAACAGCA | GCGGCAGCAT | CTCGAG     |            | 346 |

(2) INFORMATION FOR SEQ ID NO:1442:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 591 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

```
GAATTCGGCC TTCATGGCCT AGGCTTCCCT GTTCCCTCAG CCCAGTCGA GAGGAAAGAG      60
AATCGGGCCA CTGCCAGAAA GAGAGTCAAG CAAACCTGGA AGGGCAAATC TGAGAGTGGG      120
AAGGCCAAAG GCCGAGGGCC AGATTTAGTA TTCACTAGCA GCGCCTTCGG GTAGCAGGAT      180
GATTCCTTTT CCTGCCTGTC TGCTGCTGGC TCTCTTCCCT AAGGTACAGG TTGGCAGGAC      240
CACCTCCGCC TACTTCTCCA CCATCCCTAG CATGCCAGCC CGTTCCCAGA TCAACCTGCC      300
AGTGGAGTCA GGCAGTGCAC TCCTGGAGCC AAGAGGGAAG GGCAGGGTAG AGAGGGTATG      360
TCCAGTAGCC TGGAGCTCCA TGGTGGCTTC ATGCCTCCCT TCTCCAGCT CAGGTGGCCC      420
TGAGGGCTCC CTCGGAACAG TGCCTCAAAT CCTGACCCAA GGGCCAGCAT GGGGAAGAGA      480
TGGTTGCAGG CAAATGACAC TTTATAGAGA TTTTCTATTG CTGGGAAGGT GTGTTTCTCC      540
CACAAATTGT TTGTGAATAT TCACCTGTTT TATAAATGTC TGACCTGTCC G      591
```

(2) INFORMATION FOR SEQ ID NO:1443:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 526 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

```
GAATTCGGCC TTCATGGCCT AGATTGAATT ACCTGCCTCG AGCTCCTGTC CTTAGGTGAT      60
CTGCCCCGCT TGGCCTCCCA AAGTGCTGGG ATTATAGGAG TGAGCCACCT GGCCAGCTA      120
GCTTTTAAAG TTCTGCCAGC ATAGCCCCGG GATGGGGTGG GGGTAGACAG GGCCCTTAGGA      180
CTTTCATTTT TAAATGCTC ACTCCACAGT GAAGAAACAG GTGATGACTA TCCTGAATAT      240
TTGGGAAGCT GTGTCCTAGA ATTTTGGCC TCAGTTCAG AACCACAGC TTCTTTACAA      300
CATGCTTCAA GCCTGGGACT GAGCTGCCAG TAAATAAACC CCTAGTAACC TTAATATGGG      360
TTAATAAGAT TAGGTGCCCG CTCTGCACGC TCCCTGCCC CTCCTCGTCC GGGCACCTGT      420
TATGCTAGGC CAGCATGTTT GCAGCTTAGC CAGGGAAAAT CGTGGACCAA GACAGGGCTT      480
TTCATCCACG ACTGGCTAAA AAGATGGCTC TCAATAATAT CTCGAG      526
```

(2) INFORMATION FOR SEQ ID NO:1444:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

```
GATTGAATTC TAGACCTACC TCTCTTTTTT TGTGGTCTCT CCTTCATTCT CTGTTCAATT      60
CTCCGTGAGA TTTTCTGATT AGTAGTTACC TTCAGCATGC CAGTTGACTT GCAAACCTAC      120
AATCCAACCT TTCTTCTACT TTGTCATCTG ACAACAGCCT GGTTTGTAGC TGATTCCAGG      180
ACTTCTTAC TTGGGTGGCC ACTCTCATTA CCACAGAGTT CACTAGTCAT GGTGAACACA      240
CCAGTCTTTT ACACCTCCCT CACTCCCAA CCACTCGAG      279
```

(2) INFORMATION FOR SEQ ID NO:1445:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 644 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

```
GAATTCGGTC TTCATGGCCT AGGGGAAGAA AGGCACCTTT CTCACAGGCT GGTGAGAGAG      60
AGGAAGGGGG ACGGGGAAAG CCCTTTATAA AAGCATCAGA TCGGCTGGGC ACAGTGGCTC      120
ACGCGTGTA TCCAGCACT TTGGGAGGCC GAGGCGGGTG GATCGCGGG TCGGGGGTTT      180
GAGGCCGGCC TGGCCAATAT GGTGAGACCC CGTCTCTGCT GAAGATACAA AAATTGGCTG      240
GGCATGGTGG CGGGCACCTG TGGTCCCGGC TGCTTGGGAG GCTGAGGCGG GAGAATCGCT      300
TGAGCCCGGG AGGCAGAGGT TGCAGTGAGC TGAGATCGCG CTA CTGCACT CCAGCCTGGG      360
CAACAGAGCG AGACTCCATC TCAAAAATAA AAGAAAGGCA TAAATATTAC ATTACCCTCT      420
GAATACTGTG GTGTATACT TGAGTTTTTA TGTGTGTATA TATATGTGTA TAGGAGAGTA      480
AAAAATAAAT GAAATTAGGA TTTTGCAAGT TATAATCATA TAAAATTGAT TACCCTAAAT      540
ATATCATTAG GATATTATGT TATTACATC TCTTATGCTA ATTCCTAATT TCTTTTATTG      600
TAGTATAGTA GAATTGAGAT TTGNNAAATG AATTGGTCCT CGAG                          644
```

(2) INFORMATION FOR SEQ ID NO:1446:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 756 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

```
GAATTCGGCC TTCATGGCCT ACCTCACCCG GCCCGGACAC GGACAGGATT GACAGATTGA      60
TAGCTCTTTC TCGATTCCGT GGGTGGTGGT GCATGGCCGT TCTTAGTTGG TGGAGCGATT      120
TGTCTGGTTA ATTCCGATAA CGAACGAGAC TCTGGCATGC TAACTAGTTA CGCGACCCCC      180
GAGCGGTCCG CGTCCCCCAA CTTCTTAGAG GGACAAGTGG CGTTCAGCCA CCCGAGATTG      240
AGCAATAACA GGTCTGTGAT GCCCTTAGAT GTCCGGGGCT GCACGCGCGC TACACTGACT      300
GGCTCAGCGT GTGCCTACCC TACGCCGGCA GGCGCGGGTA ACCCGTTGAA CCCCATTTCG      360
GATGGGGATC GGGGACTGCA ATTATTCCCC ATGAACGAGG AATTCCCAGT AAGTGCGGGT      420
CATAAGCTTG CGTTGATTAA GTCCCTGCCC TTTGTACACA CCAACCCGTC ACTGACTTTT      480
ACCGCAGCTG GAACTGTGCT CCAGGGCCCT TCCATCTTTT CCCCACACT CCCTTTGACC      540
CTGTGTTGCC CTCAGAGGCC AAATCTTGG GCTCAGGGAC TGGCTTTTCG CCTATTGGTG      600
GTGGAGCTGG GGTTCGGCA AGGAATTTCA GGCAGCGCTT GGAGGCAATG TTCCCCGAGA      660
GCAGTTCACG GTGGTGATGT TGACTTATGA GCGGGAGGAA GTGCTTATGA ACTCTTTAGA      720
GAGGCTGAAT GGCCTCCCTT ACCTGGAAT CTGCGAG                          756
```

(2) INFORMATION FOR SEQ ID NO:1447:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 359 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGGTCACCTGG GATCATCTGA ACAGAAGTGC      60
ACAGGCTACT TGTACAGAGA AAAAATTAAT ACTCAAAGGA AATCTTCATT TTTTAGATTG      120
ACTTTGGGAA TTGAATTTT CATCAGTGCA AATATAAATT TCTCTATCCT GCTCTGAGGC      180
TAATTGGTAC CATATTTTCC CTTTGTGTCT TGTGACTCTG CCACATCCCA TCTCATCCTG      240
GCCTCTGAGT CAAGAACCCA GTGAAGTGAC TTTCTAGTTC TAGAAGTCC GCTGCAAGGC      300
CAGGAAAGCT TGAGAAAGGT ATTGTGGAAG AAGCAAAGGT AGACCCCAT TCACTCGAG      359

```

## (2) INFORMATION FOR SEQ ID NO:1448:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

```

GAATTCGGCC TTCATGGCCT AGGGAAAATA AGTTAATTCT AAATCAAATC TAAATATTAT      60
ACCTCATGCT ATGGTTTTAT TTTATTTTCTG TGCTGCCGTT ACTTTTCCTC CCCAAAGCAA      120
TGTGTTTTCC AGCCACAACC CTCGAG      146

```

## (2) INFORMATION FOR SEQ ID NO:1449:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

```

GAATTCGGCC TTCATGGCCT ACTTTTCAAA AGCAGCTTTG CTCTACTGAT TTGGGTAAAA      60
GCTTAGTTGC AGTTGGNTTG GGAGGAAATG GGAGCAGAAA ATTTGAGAGA GTGAGTGTAG      120
ACAACTCTTT CAAGGAATTT CGCTATAAAT GGGAGTAGAG ATCTGAAGAC TGAATAATTA      180
GCAAACTGAA AAGTGGGAAG ACGTAATTCT CTTATTATTT CATTTTCTT AGTGAAATAA      240
GAGGTGAAGT TCTCTGAGTA ATAGGAGGGT CAAACAGGNG TTAGAAGTTC ACAAAGAAAG      300
GTCTCGAG      308

```

## (2) INFORMATION FOR SEQ ID NO:1450:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

```

GAATTCGGCC AAAGAGGCCT AGCATGTTGT GGCTGTTCCA ATCGCTCCTG TTTGTCTTCT      60
GCTTTGGCCC AGGGAATGTA GTTTCACAAA GCAGCTTAAC CCCATTGATG GTGAACGGGA      120
TTCTGGGGGA GTCAGTAAC CTTCCTCTGG AGTTTCCTGC AGGAGAGAAG GTCAACTTCA      180
TCACTTGGCT TTTCAATGAA ACATCTCTTG CCTTCATAGT ACCCCATGAA ACCAAAAGTC      240
CAGAAATCCA CGTGACTAAT CCGAAACAGG GAAAGCGACT GAACTTCACC CAGTCCTACT      300

```

|  |     |
|--|-----|
| CCCTGCAACT CAGCAACCTG AAGATGGAAG ACACAGGCTC TTACAGAGCC CAGATATCCA  | 360 |
| CAAAGACCTC TGCAAAGCTG TCCAGTTACA CTCTGAGGAT ATTAAGACAA CTGAGGAACA  | 420 |
| TACAAGTTAC CAATCACAGT CAGCTATTTC AGAATATGAC CTGTGAGCTC CATCTGACTT  | 480 |
| GCTCTGTGGA GGATGCAGAT GACAATGTCT CATTTCAGATG GGAGGCCTTG GGAAACACAC | 540 |
| TCGAG  | 545 |

## (2) INFORMATION FOR SEQ ID NO:1451:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT ACAGTAAGCA GATGAACTTG CTGCTGTTC TCGAAGTGAG  | 60  |
| GACTGAAGGG AACGAAACT GGGGTGGGTT TTTGCGCTTC AAAAAGGGA AGCGATGTAG   | 120 |
| CCTCGTTTTT GGACTGATAA TAATGACCTT GGTAATGGCT TCTTACATCC TTTCTGGGGC | 180 |
| CCACCAAGAG CTTCTGATCT CATCACCTTT CCATTACGGA GGCTTCCCCA GCAACCCAG  | 240 |
| CTTGATGGAC AGCGAAAACC CAAGTGACAC AAAGGAGCAT CACCACCAAT CCTCTGTAAA | 300 |
| TAATATTTC TACATGAAGG GAACCCTCGA G                                 | 331 |

## (2) INFORMATION FOR SEQ ID NO:1452:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGGAA GGGAAAATTT CAAGTCAGAT AGAATTCTAT ATATACCATT | 60  |
| TCTTTGGAAC CTTGAGCCCT CAAGATTCCA ACATCATGAC CTCAGTTTCA ACACAGTTGT | 120 |
| CCTTAGTCCT CATGTCACCTG CTTTGGTGC TGCCTGTTGT GGAAGCAGTA GAAGCGTATA | 180 |
| TGCACGAAAA AGAAATGGAC AGATGTGACT TTGAAAGGCC TACTGAGTCA AACCTCACC  | 240 |
| TGAAAACCTT TGCAGCACTC GAG   | 263 |

## (2) INFORMATION FOR SEQ ID NO:1453:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AATTTTAAAG CCCTGCTAAC TTCAATGTCT AGGTCACCCA | 60  |
| TTGTTTATT TTTATGGTCT TTTTTCATCC TGATTTTGG TCATTTGGTC CCGTCTTATG   | 120 |
| GCATACCTGG TAATATTTTA TTGAATCCTT AGTACTGTAC ATGAAAAATT GTAGAGGCC  | 180 |
| CAGTAGTTTT CTTTCTCTGA AGAGGAGTCA CCCTTTCCTT CACTAGACAG TTATGTTGGG | 240 |

```

GGTTATATAC CTTACTCCAA TCAAAGATTG AGCTGAGTCA GAACTCTAAG GGAGTTAAGT      300
TTTGTGTGCC TCTGGGGACC AGGGGTTCCA ACTAAGACTG TGATATTCAC CAGGATCCAA      360
TTTCCCGATG CCTCTTGAAC TCTTATTCTT ATCTTTTAA CACATCAAGG CAGCTGGTTT      420
GCATTTTCT TTCTGTTTCT CTTTCTAGCT TCATCCTTTG CAGCTTTAGA AATTGACAGT      480
TGTCTTACAG GGAAAAGTAG CTGTGTAACA AGCTCATGTC TCTGCCTCTC TTCCACTGAT      540
ATCTTAGCCC CGCAGGAG

```

## (2) INFORMATION FOR SEQ ID NO:1454:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

```

GAATTCGGCC AAAGAGGCCT ACCTAAACCG TCGATTGAAT TCTAGAAATA CAATGATTTT      60
AAAAAAGATT TCCAAAGGCT TTTTCTTTT TTTCTTTTTC TNGAGACAGG GTCTCACTCT      120
GTGCGCCAGG CTGGAGTGCA GTGACACAAT CTCGGCTCAC GGCAAGCTCC GCACTGCCCC      180
CTCAGGTTCG CGCCATTCTT CCGCCTCAGC CTCCCGAGCA GCCGGGACCA CAGGCACGCG      240
CCACCACGCC CAGCCAACTT TTACATTTT AGTAGAGACG GGGCTTCACC ATGTTGGCCA      300
GGATGGTCTC GGTCTCTCT GCCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1455:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

```

GAATTCGGCC AAAGAGGCCT ACTTGATGTC TGTGACCCAC ACNTATTTCG ACACTCCCTC      60
CCCTTTTGAA AATCCCTAAT AAAAAGTTGC TGGTTTTTGC GGCTAGTGGG GCATCATGGA      120
ACCTACTGAC ATGTGATGTC TCCCCGGAT GCCCGGCTT AAAATTTCTC TCTTTGTAC      180
TCTGTCCCTT AATTTCTCAA GCTGGCCGAT GCTTAGGGAA AATAGAAAAG AACCTAGGTG      240
AATATTGGGG CAGGCTCCCT GATGAAATGA TATATATTCT TAAATAAAC TTTTCATCTT      300
TGCATATACG TTTATATGCC GAGTTTCTC CAACCTTGTC TTACAGCACT TTGTATACTA      360
CATTTAGGCC ATACTAACT CTTGCAGTTC CTGAGACATG TGCTGTATCC TATTTCTTCT      420
GGTCCTTTTC TCATTGATTA ACTACCTGGA GCATACTTTT AATTCAGTGT CAGCGCTCGA      480
G

```

## (2) INFORMATION FOR SEQ ID NO:1456:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

```

GAATTCGGCC AAAGAGGCCT ACTTCACCTT CAAGTCCCCT TTCTCAAGAA TCCTCTGTTC      60
TTTGCCCTCT AAAGTCTTGG TACATCTAGG ACCCAGGCAT CTGCTTTCC AGCCACAAAG      120
AGACAGATGA AGATGCAGAA AGGAAATGTT CTCCTTATGT TTGGTCTACT ATTGCATTTA      180
GAAGCTGCAA CAAATTCCAA TGAGACTAGC ACCTCTGCCA ACACTGGATC CAGTGTGATC      240
TCCAGTGGAG CCAGCACAGC CACCAACTCT GGGTCCAGTG TGACCTCCAG TGGGGTCAGC      300
ACAGCCACCA TCTCAGGGTC CAGCGTGACC TCCAATGGGG TCAGCATAGT CACCAACTCT      360
GAGTTCCATA CAACCTCCAG TGGGATCAGC ACG                                  393

```

## (2) INFORMATION FOR SEQ ID NO:1457:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

```

GAATTCGGCC AAAGAGGCCT AGTGTGTGTG TGTGTGTGTG TGTGTGTGTT TTATCTCCTT      60
CAACTCTGAC CACCTGGAAG TCAGCCTAAT CTCTGCCCTC GTGTGTATCT TTAATTCAAC      120
ATTTAATTAC CTATCTTGGT ATCCATATGA ATTGATTGT TTTTGGCT TTTTGAAC      180
TCATAAAAGG TATCCAAGTT CCTGGAGGGC ATAGTGCCCA TCTCTCCCA TCCACCAGTG      240
GACATTCTTT TCAAAAGAC ACATGG                                  266

```

## (2) INFORMATION FOR SEQ ID NO:1458:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

```

GAATTCGGCC AAAGAGGCCT AGGTTGTAGT TACTTTCAGA GTAGATACAG GGTTTTAGAT      60
CATTACAGTT TAAGTTTCT GACCAATTAA AAAAACATAG AGAACAAAAG CATATTGAC      120
CAAGCAACAA GCTTATAATT AATTTTATT AGTTGATTGA TTAATGATGT ATTGCCTTTT      180
GCCCATATAT ACCCTGTGTA TCTATACTTG GAAGTGTTTA AGGTTGCCAT TGGTTGAAAA      240
CATAAGTGTC TCTGGCCATC AAAGTGATCT TGTTTACAGC AGTGCTCTCG AG          292

```

## (2) INFORMATION FOR SEQ ID NO:1459:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

```

GAATTCGGCC AAAGAGGCCT AGTTTATGA GAGGGTTTCC ATTAAGAAGT TAATTGAAAT      60
TCTTTATTTA TGTAATATGA AATTTCCAAT TAAATTATTT CACACAGCAT TTTTCCCT      120
TAATTCATT AGTTTTTTA TTTCTGGCC GACCCAGGCC AGGAGCTTAG GGAAATGAT      180

```

GAGGCCTCTT TTACGCTGTA GTCCTGCAAA TGCTGTGTTT TATTCCCCCT CCCCTGCTCA 240  
GCACTCACCC ACGACTGACA CATGGGGTAC ACACACACAC ATACTCGAG 289

## (2) INFORMATION FOR SEQ ID NO:1460:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 330 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC AAAGAGGCCT ACACCTGCGT TGGAAACATCT GATCCAGTGA TAGCACGTCA 60  
CTAGGTGCCT TAATTAATAA AGCCAAAATA TCTTCCACT AGCAAATAA TCGTATTCAC 120  
TTTACTCTC CCATTTTAA TTAATCTTC CTATTTCAAT TCACCCTCTC ATCTCTTCC 180  
TCTATTGGAT TATCTCAGGT ATCTAATCCA ATTCACTACT GTTTAATGAA TGTAATTGCA 240  
ACCACTCTGC AATTCCTAAG GTTTTGTTTC TTTGCTTTT TCTTTGTAG TCCATCTCTT 300  
TGCTACACTC AAGCAGGTCT AGAATTCGAG 330

## (2) INFORMATION FOR SEQ ID NO:1461:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 383 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GAATTCGGCC AAAGAGGCCT AGGGACAGTG ATTATAGGAC TCCACACATG CAACTGAATC 60  
TAGCATTACT GACTTTAAAT TTTTGAGCC TATCTAAAGG CCAGATGCTA TCAGCAGCTG 120  
AACGGCATCT ACCAAAACCA GCTGCAAAGA TAGAAGCGGA ACAACTGGTT TGGTGGAGAG 180  
ATTCGATAAC AACGAGTTGG GAAATAGGTA AAATAATAAC ATGGGGTAGA GGTATGCTT 240  
GTGTTTCTCC AGGCCAAAC CAGCAGCTGA TTTGGATACC ATCAAGATAC CTGAAAATT 300  
ATCATCAGCC AGATGCCAAG GAAGAGATT TGGGAGGAAC CCGAGGACCC CATGTTATTA 360  
TTTACCTAT TCCCAACTC GAG 383

## (2) INFORMATION FOR SEQ ID NO:1462:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 375 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GAATTCGGCC AAAGAGGCCT ACGATGACGT CACCGTCACC ACCGGCGTGA AGCGAGACAG 60  
TGGTGAGGGC TTCTGGACTG GATGGAGGAC CTGAAGACAT GAGGTGGAGG CACAGGTAGA 120  
AGAGAAGATT CTCACCATCG CTGATTCACA CAAAAGCATT TCTCCAAGTG GTTGCAGATG 180  
ACATGATTC CCAAAGTGT AGAGCTGAAG TGTGTTTCCT TGTGTATATA TACTGTGGTT 240  
CCTTTATCCC TTCATCTGTG GATAGACAGG TGCAACCGTG TGGTCCCCA CGATATGATT 300

TCATTGTGGT TTTCTGTCTG AAGAGTATCC CAGTATGTAC CTGTGGAGCA GCTTCTTTAT 360  
CCCTTCTTAC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:1463:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 174 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTTGGGC GGAGACACAA ATTCAAATCA TATCAACCTG GTAAAGAATT TGGATTTTAT 60  
TTTGAGTGTG TTAGTGAGTA TTGCATGGCT TTGAGCAGAG AAAGGATGAT TTATATGTTT 120  
AAAAGAGTGC TTTCCTCTT ATATGTGGAA GAGATTGTAG GAGGAGGACT CGAG 174

(2) INFORMATION FOR SEQ ID NO:1464:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC AAAGAGGCCT AGTTGCGGTT TAAATTTCCA AATGTATGGC ATTTGCTTGT 60  
TTTTTAAGTT GATTCTAGT TTTATCACAT TGTGTCAGA GAATGCTGAG AAAGAGCTCG 120  
AG 122

(2) INFORMATION FOR SEQ ID NO:1465:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC AAAGAGGCCT ACTTGAGCTT TTTTCATGTG TATATATTTA TGCTTCTTTT 60  
CTAAAAAAA TTGAGATGGA AATTCACATA ACAGAATTAA CTAAAGCATA CATTTCATTG 120  
GTATTTACTA CATTACAAT GTTGTGCAAT CATTACCTCT CTCCAGTTCT AAACATTTCA 180  
TCACCCCAA AGGAACCCCT AAGCGGTCAC TCCCCACTCC ACTGTCTCCC ACAGCCCTCG 240  
GCAACCAGCA GTCTGCTTG TGTCTCAATG GATTACCTA CTCTTGATAG CTCTACAAAT 300  
GGAACAATAC TCGAG 315

(2) INFORMATION FOR SEQ ID NO:1466:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 175 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGGTAAGAGA AACGACCAAT TCTACCAATT ATTCTACAAT | 60  |
| GTGGGTTTTT ACTGCTCTGT TCACATGCCT TATTCAGACT TCTTGTGGTG GTCAATTGCT | 120 |
| AGATGGTCTG TTGGAATTAT CTGCTGTCAT ACATCCAAA AGGTCTCACA GAGAG-      | 175 |

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 350 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGAAGGACAC CTCCATCCAT TCCACGCAGT TGCTCAAAGC | 60  |
| AGAAATTTTC AGTGCAAGTC TTGATGCTGC GCCGTCCCCC ACTCCCTACA TCAGAACGCA | 120 |
| TCCCTCATCT GGAATCCAGC GGTGGCTTCT TGATGCTGCG CGGTCCCCCA CTCCCTACAT | 180 |
| CAGAATGCAT CCCGCATCCA GACTCCAGCG GTGGTGTCTT ACCTGCACGC TGTTGCCAAG | 240 |
| TCCAAGCTAC CATACTCCTG CCTGAGCTAT GACAACAGCC TCCTCACTGA TCTCCCCTTT | 300 |
| CTTCCCTTTC CCTCTCCAG CTCATTTTTC ACAGTGTAGA ATGACTCGAG             | 350 |

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 419 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

|  |     |
|--|-----|
| GAATTCGGCC AAAGAGGCCT ACTATACTAA AATTCTGTGC AAAAAGATGC TTGAAATTAT  | 60  |
| TGTAGAGACT GAATCTTTGC TGCTTGTTAT AAATATTGCA GGGCATAAAC CTTCATTCA   | 120 |
| TAGGTTTCATC AGCTTTTATG ATTGGGAGTG ACAGGGAGGC AGCATTGCAG TCCTTAGTCC | 180 |
| TAGGTGTGGT CTAGAATTTA CCCTGTATTT AAGTCACTTT GGAATAGAAG TTTTTTTTCT  | 240 |
| CGGACAGGAT AACTATATA TTTTAAATC TCCTCCATA GTCGTAGTGC AGAGATATAA     | 300 |
| ATAGAAGTAC AGGTAAGAGA TGTCTTCTGC CTTCAAACC CTTCTAAGT TTGTGTGCTG    | 360 |
| CTTAACTTT ATTACATAG AGCAGTCTGT TTTATTACTC AGGATATGGG CCACTCGAG     | 419 |

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 612 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

```

GAATTCGGCC AAAGAGCGAT GGGGACAAAG GCGCAAGTCG AGAGGAAACT GTTGTGCCTC      60
TTCATATTGG CGATCCTGTT GTGCTCCCTG GCATTGGGCA GTGTTACAGT GCÂCTCTTCT      120
GAACCTGAAG TCAGAATTCC TGAGAATAAT CCTGTGAAGT TGTCTGTGTC CTAÏTCGGGC      180
TTTTCTTCTC CCCGTGTGGA GTGGAAGTTT GACCAAGGAG ACACCACCAG ACTCGTTTGC      240
TATAATAACA AGATCACAGC TTCCTATGAG GACCGGGTGA CCTTCTTGCC AACTGGTATC      300
ACCTTCAAGT CCGTGACACG GGAAGACACT GGGACATACA CTTGTATGGT CTCTGAGGAA      360
GGCGGCAACA GCTATGGGGA GGTCAAGGTC AAGCTCATCG TGCTTGTGCC TCCATCCAAG      420
CCTACAGTTA ACATCCCCTC CTCTGCCACC ATTGGAACC GGGCAGTGCT GACATGCTCA      480
GAACAAGATG GTTCCCCACC TTCTGAATAC ACCTGGTTCA AAGATGGGAT AGTGATGCCT      540
ACGAATCCCA AAAGCACCCG TGCCTTCAGC AACTCTTCCT ATGTCCTGAA TCCCACAACA      600
GGCGCACTCG AG                                          612

```

## (2) INFORMATION FOR SEQ ID NO:1470:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 220 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

```

GAAAAGCCAA GACTTTAACT TTCATTACAT ATCTAATAGT TGATATCACC AGTTACCATT      60
TTGAATTTTG TATAGTACTA GGTTAGAACA TTGCTTAATC CTTTAAAAA AAATGCATTT      120
ACGTAGAACT CGAGCAGGAT GTTGGCCCC GATGTTTTTT CTTCATACTC TTCTGTCGCC      180
TCCTCCCAT TCTGCACAGT TCTACCCAC TACTCTCGAG      220

```

## (2) INFORMATION FOR SEQ ID NO:1471:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

```

GAATTCGGCC AAAGAGGCCT AGGGCATCAT GCAGACACAT CTGTTAAAGC AGGAAAAAAA      60
AAACCATGTG GAAGATTAG CTAGGCAGAG TGCCTGAAA GCCCTCTGCA ATAAGTTGAG      120
CTGGAAAAAC CTCCATATCT AAAGATGCTT TAATCATCTC AAGAACACCA ACAACATTTT      180
CTATTATAAT ATAACATGA TAGATGTGAA TCTACCTCTT GGATTAAGGC AATAATTTTA      240
TAGCTATCAA ATTTTCACAG ACACCATTTT CACTACTCTG AGTTGCATCT CTAACAAGCT      300
TCTTTAGCCT CTGCCTACAG ATTTCAGTGA CAAAGCCATT CAGCTCGAG      349

```

## (2) INFORMATION FOR SEQ ID NO:1472:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACAACAAACC | ATTCTTCAGC | ACCTTTGCAA | AAACATCTAT | 60  |
| GTTTGTTTTG | TACCTTTTGG | GCTTTATTAT | TTGGAAGCCA | TGGAGACAAC | AGTGTACAAG | 120 |
| AGGACTTCGC | GGAAAGCATG | CTGCTTTTTT | TGCAGATGCT | GAAGGTTACT | TTGCTGCTTG | 180 |
| CACAACAGAT | ACAACTATGA | ATAGTTCTTT | GAGTGAACCT | CTGTATGTGC | CTGTGAAATT | 240 |
| CCATGATCTT | CCAAGTGAAA | AACCTGAGAG | CACAAACATT | GATACTGAAA | AAACCCCCGC | 300 |
| GGTACTCGAG |            |            |            |            |            | 310 |

## (2) INFORMATION FOR SEQ ID NO:1473:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | ACAACCTTAA | GATTAGCTAC | TTTGAATAAT | CTCAGTAGGT | 60  |
| TCTGGGGCAC | AGGAGCTGCC | CCTCTTGGTC | TGAGATTGG  | CCATGGGGTG | ATTAGGACAG | 120 |
| GTATAGTGGC | ACAGAGTGTA | AAAACCCCAT | AATGGTGTGG | ATTCTGGATT | GCTTAGTTTG | 180 |
| CATTTGACAA | GTGCATGCCT | GGGAGGAGGA | CTCCTCTTAG | TAAAGAGGAT | GGGAGGCAAG | 240 |
| AAGAGAGGCC | AGAGGCCAAG | ACAAGGTAAC | TTAGGCATAG | CATCAGGTTG | TCTCGAG    | 297 |

## (2) INFORMATION FOR SEQ ID NO:1474:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AAAAAAGTAT | GCAACACTCA | GTTTATTTAA  | TACTTACAAG | 60  |
| GGGAAATCAT | TAGAAACACA | GAAAACCACA | GTTGCAGCTC | GACATGGATT  | ACAGAGTCTT | 120 |
| GGAAAAGTCG | GTATTTACAG | GCGTATGCCT | CCACCTGCTA | ACCTCCCAAG  | TCTTAAAGCA | 180 |
| GAAAACAAAG | GCAATGATCC | TAATGTAAAC | ATTGTACCTA | AAGATGGCAC  | AGGGTGGGCA | 240 |
| TCAAACAAG  | AGTAACATGA | AGAAGAAAAA | ACACCAGAAG | TGCCACCAGC  | ACAGCCAAAA | 300 |
| CCTGGGGTTG | CAGCTCCCCC | AGAAGTAGCA | CCTGCTCCCA | AATCATGGGC  | CAGTAACAAG | 360 |
| CAAGGTGGGC | AAGGAGATGG | AATCCAAGTG | AATAGTCAGT | TTCAAGCAAGA | ATTTCCAGC  | 420 |
| CTGCAGGCAG | CTGGGGATCA | GGAAAAAAA  | GAAAAGGAAA | CAAATGATGA  | CAACTATGGA | 480 |
| CCTGGACCCA | GTTTACGTCC | ACCACTCGAG |            |             |            | 510 |

## (2) INFORMATION FOR SEQ ID NO:1475:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

```

GAATTCGGCC TTCATGGCCT AATCCATTCA TTTGATGGAC ATTTTCTAAG TACTGTGAG      60
CCAGGTGCTG CCATTTCAAA GTCTCTTCTT ACCACGCTCC TCAGTGGCTA GACATTTTCA      120
CGTGGCCAGA AAGTCCCGAC TCTTGCTGGG CGTCCCCTGGA CAAGTTGCCT TCCTCCTCTG      180
AGCTTGGCGC TCCCCATCTG TATAGTGGAG ACCCTTGGCC CCCCTCTGTA CGGAAGGGCC      240
GATGCGAAGC TGCAGTTAAA AAAGGCTCAC ATGCTCCTAG CCTGTGTCAG TCAGGAGGGG      300
AGACCAGGAC AGTTGGAAAT TATGATTGCA AATGGCTTTG CATTTTAGAT CATTCTGTG      360
TGTGGATCAG AGAAACGCAC AAGTTCCTG GCATCTCGAG      400

```

## (2) INFORMATION FOR SEQ ID NO:1476:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

```

GAATTCGGCC TTCATGGCCT ACCACATTTT GTCAGCAGAG AGCCTTTTAA ACTTGGATTC      60
CAACTTCCTG TTGTCTAAAC GGAACCTTCC GAACGTAGGA CTTATAGGGG AAGCTGCTGT      120
GCATGTCAAA AAAACTACTA ATCAGAAATGA GCTTTGTGCT CCAGAGCCAG AACTGCTGCA      180
GAAATTTTTA TAATTTTGCA ACTTCTTTT TTACAAGGAA CTTTGTGCT ACTACACATC      240
AGGACTTTTG AAGCATCCAA TAAATCCATT TAATAAGTAT GAGCATGTGT CTGAGTGGAC      300
AAGAAAGTGA AACCATCCAT GCTACATTGG ATAATTTTTC CTCCCCCAGA CTGGACAGGG      360
AATCTCAGCT TTCAAACAG AGTAACCTGG CTCCACTTAC AAAGCTGCAC AGGCATTAAA      420
GATCGTGCTG CCTTTGTTAG GCAGATTGG AGGGGAGAGC TCGAG      465

```

## (2) INFORMATION FOR SEQ ID NO:1477:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

```

GAATTCGGCC AAAGAGGCCT ACATGTAGCT ATCCTAAGAC GTATTTTATT TTGAGCCACT      60
TTCTCAGAGG GAATTGGGTG GGTGTGGTCG TAAGAACACC TAGAAAATAG GGGTGAAACC      120
TTTATGGGGC CAGGGGAGCC ATGGCAGAGG GTGGAGTGGG GGATAGAAGC CTTCAGACTC      180
CTCCGCCCCA GCCACTCTGC ACCTGGGGCC TTTCAGCTGT TAAAATGAAA AGCCAATTAT      240
CTTCTGTAAA TGAGGGAAAA AAAGAAGGAA TAAAAGTGTC TATTATGTAT GCTGATATGC      300
ATAAACTTC AAATAAAAGG ATATATAAGC ACTTGACAAA TTGAGGAGAG AGGAGGGGAG      360
AGTGCTGGGC GCTCGAG      377

```

## (2) INFORMATION FOR SEQ ID NO:1478:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

```

GAATTCGGCC AAAGAGGCCT AGAGATTCAG TTTATTCTAT ACTCAGACTT TGGTATCCCC      60
TTAGATGCCC ATGTCAAAAA TGAGAAAGTT GGTGACATGG TATGGCATTT TATTGCTTTT      120
TGTTTGTTTT CCATTGCTAC TTTCACTCAA ATTCCAAGGA AATCACAGAA GAAGGGCTTT      180
TGGTGACCTA AAAGTAGAAA TGAAAGCAAC AAAATGCATT CTGTCCAGCA GTACACTGAA      240
GACAAAAAAT GTAGTTGAAA AGTCTCAGGG AGCGCTCGAG                                280

```

(2) INFORMATION FOR SEQ ID NO:1479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

```

GAATTCGGCC AAAGAGGCCT AATTGCTTT GCCCAGTAGT TGGAAAGTGA ACTCGACTCG      60
TGATGGTTCT CCTGTCACTT TGGTTGATAG CAGCCGCTCT GGTAGAGGTT AGGACTTCAG      120
CTGATGGACA AGCTGGTAAT GAAGAAATGG TGCAAATAGA TTTACCAATA AAGAGATATA      180
GAGAGTATGA GCTGGTGACT CCAGTCAGCA CAAATCTAGA AGGACGCTAT CTCTCCCATATA      240
CTCTTCTGCG GAGTCACAAA AAGAGGTCAG CGAGGGACGT GTCTTCCAAC CCTGAGCAGT      300
TGTTCTTTAA CATCACGGCA TTTGGAAAAG ATTTTCATCT GCGACTAAAG CCCACACTC      360
AACTAGTAGC TCCTGGGGCT GTTGTGGAGT GGCATGAGAC ATCTCTGGTG CCTGGGAATA      420
TAACCGATCC CATTAAACAAC CATCAACCAG GAAGTGCTAC GTATAGAATC CGGAAAACAG      480
AGCCACTCGA G                                                    491

```

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

```

GAATTCGGCC AAAGAGGCCT AATTCATTCA GTCGTCATGA GTTGAGTGCT TACTACATGC      60
AAGGCACTCT GCTAGTTATA TTCTAATAAT GCAGAGATAA TTAGACATGG TTCCCGCCCT      120
CAAGAAGCTC ACAAAGTAT TCAGGAAATA ATGCAGACTA GTGATTTTGC TATAAAATTA      180
TTTTTGAAGG AAGCAGACAC AGCAGTATTT ACCTGTAGGT GGAGCAAGTA ATAAGCCATG      240
CTGTGCAATA TATACATAAA GCTTCTGCTT CTCATGGGAA TTTAGTTACA GTGCTTGGAA      300
TGAGAAGGGG AAGGAAAGAA TTAACAAATG CCAAGATTTC TGGAGCAGAT TGTACAGCTG      360
TGACTTTGGA AAACAGAAAG TAAGACCCTC AGAAAACCAA TGAAGTCTAA GAGAAATAAA      420
ATTTAGTGGA CAGGTATGAA AAGTGTAATT GCGCCTAACT ACCAGATGGA GACCTTCAGA      480
ATGGGCTATC CTTAGAGTCT AGTACATCAA GAGACCCCTC GAG                                523

```

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AAAAAAAAAA AAAAAAGAAG ATATAAGCTA CTAGTATCAA | 60  |
| AAATGAAAGA GGGGCTGTTT CTACTGATCC TGCAGACACT CGAG                  | 104 |

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 337 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AACTGAAGT AAGAGATGCA CCTGAGAAAA CCTGGGCTTG  | 60  |
| CATGGGTTTG GCAATACATC AGGTGTTAAC TAAGGACCTT GAAAGGCATG CAGCTGAGTT | 120 |
| ACAAGCCCAG GAAGGATTGT CTAATGATGG AGAAACAATG GTAAATGTGC CACATATTCA | 180 |
| TGCAAGGTGA GGAATTTGAT GTATTAAAGT ATTACTTAGA ATGGGACATT GAAGGCCATT | 240 |
| TAAGAATGAA NACGCTCATT TTATAAAAT GAGGAAATCA GTAAAAGGA CATGAGTTCC   | 300 |
| TTGCCATCTC ATTGATCATC AACTGAACA ACTCGAG                           | 337 |

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 168 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

|   |     |
|---|-----|
| CGATTGAATT CTAGACCTGC CTCGAGAGCG CGCTGTTGAA TACCCAGTAT GATGGTCCTT | 60  |
| AGCCTTCTTA GACCTTTCCT GTACCACTAC CTCTATGCCT TTTGCCAAGT CCAAGTGTTT | 120 |
| ACCAGAAATG GAACTGATGC CAGAAAGACT ACAGCAACAA TACTCGAG              | 168 |

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 478 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

|   |    |
|---|----|
| GAATTCGGCC AAAGAGGCCT AGCAACCGCG CCTGGCTGCC TTTTCATTTT TAAAAACGTC | 60 |
|---|----|

```

AGTGTCGCTC CCACACAACA TGCAAACCCCT CCTGCCGAGC TGCGACCTTC GCCTGTCACG      120
GAACCTGGTG CTGAGTGTGG TGAGAGTGAA TCCTGCAGCA CGTGGCGCAC TGTCGGCCCTC      180
TTTCATGTTT AGCTTTTGAT TGTGCTTATT GTCCATTTGT ATTTCTTCTT CTAAGTGTCT      240
GTTCAAGACT TTTCCGTCTT GGCTGGAGGT GGGAGGTGCC TGCTCCTGTG TTTTCTGGCA      300
TCTTTCTCTG CTGTCTTTGT GTGTCTGCAC TCAGGGAGTT TCCCTGGGGT GTGTGCCTAG      360
AGAGGTGCTG GTTGTACATT TCAACGTAGG GACAGATTCC CAGCGTGTCT TTAAAGGAGC      420
TGTGCCGCTG TGTGCTCACT TGACTCGCCG GCGTTCTTGT TTCTCCAGGC CTCTCGAG      478

```

## (2) INFORMATION FOR SEQ ID NO:1485:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

```

GAATTCGGCC AAAGAGGCCT ACACACTGCA AGAACAGAGC CAAGAACCTA CCATGTACCC      60
TTTACTTGGA TTTATCATTA CTGTTTGTGA CATTGTCTTT ATCATTCTTG TTATATTTAC      120
ATATAGTTC TTTCCCTTGG ATTATTTGAG AACAACTGC AGAACTCACA CCTCTTTCCC      180
CGAAGAACTA GGCATTAGCA CATTACAAGA ATACGATGAT AGAGATCAGA AGTTAAATGC      240
TGATGAGATA TTCCTGTCTA ATCCACGAAC CTTATTTTCAT TGTTCATCAGT TGTCCCAACA      300
GCTCGAG                                     307

```

## (2) INFORMATION FOR SEQ ID NO:1486:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 579 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

```

GAATTCGGCC AAAGATTGCT GTCCTTCAAC GTGTTTCATTA TGAAGTTATT AGTAATACTT      60
TTGTTTTCTG GACTTATAAC TGGTTTTAGA AGTGACTCTT CCTCTAGTTT GCCACCTAAG      120
TTACTACTAG TATCCTTTGA TGGCTTCAGA GCTGATTATC TGAAGAACTA TGAATTTCTT      180
CATCTCCAGA ATTTTATCAA AGAAGGTGTT TTGGTAGAGC ATGTTAAAAA TGTTTTTATC      240
ACAAAAACAT TTCCAAACCA CTACAGTATT GTGACAGGCT TGTATGAAGA AAGCCATGGC      300
ATTGTGGCTA ATTCCATGTA TGATGCAGTC ACAAAGAAAC ACTTTTCTGA CTCTAATGAC      360
AAGGATCCTT TTTGGTGGA TGAGGCAGTA CCTATTGGG TGACCAATCA GCTTCAGGAA      420
AACAGATCAA GTGCTGCTGC TATGTGGCCT GGTACTGATG TACCCATTCA GGATACCATC      480
TCTTCCTATT TTATGAATTA CAACTCCTCA GTGTCATTG AGGAAAGACT AAATAATATT      540
ACTATGTGGC TAAACAATTC GAACCCACCA GTCCTCGAG                                     579

```

## (2) INFORMATION FOR SEQ ID NO:1487:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

```

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGAGAGTC ACGCTTAGTT      60
TGCCATTGTG CCAGCTAGTG ATATTGCTGA TGTTCCTTGT GGGTGTCTCT TTAGCAAAAC      120
GTGAATGAAT GCATGTTTAC AGGGATGCTC TGGACTGGAG GATGGTGAAA TCCATCGTGG      180
TTGTCCCTCT CCCTGAATGT CTTTTGTAG CCAGGGCATC TTCCAATAT GAATTATTAA      240
GCCTTAACTT ACATTTTGC ATAATTATA ACTCTCCATT ATATATTTGG TTACATTCTT      300
TAGATGTTTT CAACATTCTT TATTAAAGTT ATTTATCAG CATCCGCTCG AG              352

```

## (2) INFORMATION FOR SEQ ID NO:1488:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

```

GAATTCGGCC AAAGAGGCCT ACAAATGGGC AGAAGTGAAG CAGTCTTGTC AGATACCTGT      60
TTTTTAAAC TCCATTTTAG AAAAGGAATT AACTAGGACT TTATATCTCT TCGTTCAATA      120
TAATTTTAAA GAAGAATGT TGAAAAGTAG ATATGTTTGT CCATTGCTG AGAATATTTT      180
GTACGTTAGC TTGTCTCTTA CAAAACTAA ATGTGTTTCT ACTTCTGATA ATGTATGTCA      240
ATTTAAATTT TGAATGGCC AAGATAAGTT GCTCTGCATC TGTCTTCAT ATGGCTCCTG      300
AGCACAGCTC AGTGAAGTGC CCTTGCAGTG CTTCTACCGT TGAATGGGT AAAACCAGGG      360
GAACTGCCT TGCTCTGAG CTTGAGCAGG TTAATCAAAA GGATAGAGCT TCCACTCTCG      420
AG              422

```

## (2) INFORMATION FOR SEQ ID NO:1489:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

```

GAATTCGGCC AAAGAGGCCT AGAGAAAGAG AGAAAGAAAG GAGGGAAGGA AAGGAAGGAA      60
GGAAGGAAAG AAGGAAAGAA GGAAGAGAG GAGACTGAAG GGCCAAGGAG GGCATACAAT      120
GGAAGATGAG AGCTGTGCTC CCGGGAGGCT TGTACTCATC AAGAAAGAAA GGAGAAAGAG      180
GGGGAAGAAA AGAAAAAAAAA AGAATAAAGA AAGGAGAGAT GAAGGAATAA AGGAAAAAAAAA      240
GTAGAAAGGA AAGAAGGAGA AGGGAGAGAA GAAAGTAGGA AGGAGAACTC GAG              293

```

## (2) INFORMATION FOR SEQ ID NO:1490:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

```

GAATTCGGCC AAAGAGGCCT AGTGCAACTA CAGATAAGTA AACTTCGACT GGGTTTAGTA      60
ACACCTGTCT TTAATATTTG TCAGTGTACC TACATTGATA ACATTGACCT TTGGAAAAAT      120
TGGACTTGTA TTGTGTTATT TCTCTAGCAT ATTAGTCCTA AAAAAGTGTG AGTAATAGGA      180
GATGGAGAGG TGTTTGTGGA TTGTCATTCT GTGGTTCCTA CAGCATTCAA GTTGCGTCCG      240
TACGCTCGAG                                     250

```

## (2) INFORMATION FOR SEQ ID NO:1491:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

```

GAATTCGGCC TTCATGGCCT AATTCTTAGA AATAAAGCCA CTATCATGCA GGTATTTTAC      60
AAGTAAAAAC ATGGAGTCAG CCCAGTAGAG AAACGTTCAA ATAGTGTTGC TCCTGCTCTG      120
CCACGTTCTG TTTATGACTT TGGATATTTT ATTTATCCTT TCTGGGGTAG TTTTCAACT      180
TTAAGGTCCT AATAAACTTT TAGATTTTAT GACCTGTCCT CTTTAGCCCT GTAAGATTTA      240
AATATTATAA AGAACTGAT TTCAAAGACA CTGGTAAACT TGGACAACTA AACAAGTCCA      300
AGTATGGTAC TTATTGTGT GTGTGCATAT ATTAACCTTA TGCATATGCT GTTTTCACAC      360
CTATTTAAAC TGTTTTGA   AAACGTATAT ATCAGTTTTT GGAAAACAGA AGAAGATTTT      420
AAACGGCTAC TCGAG                                     435

```

## (2) INFORMATION FOR SEQ ID NO:1492:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

```

GCGATTGAAT ACATGTTCAA TAAGGACAAT GGACAGGCAC CTTTACCAT CACTCCTGTG      60
TTTTCAGATT TTCCAGTCCA TGGGATGGAG CCCATGAACA ATGCCACCAA AGGCTGTGAC      120
GAGTCTGTGG ATGAGGTCAC AGCACCATGT AGCTGCCAAG ACTGCTCTAT TGTCTGTGGC      180
CCCAAGCCCC AGCCCCCACC TCCTCCTGCT CCCTGGACGA TCCTTGCTT GGACGCCATG      240
TATGTCATCA TGTGGATCAC CTACATGGCG TTTTTCCTTG TGTTTTGTG AGCATTTTTT      300
GCAGTGTGGT GCTACAGAAA ACGGTATTTT GTCTCCGAGT ACACTCCCAT CGATCTCGAG      360

```

## (2) INFORMATION FOR SEQ ID NO:1493:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

```

GAATTCGGCC TTCATGGCCT AAGCAGACAA TATAGTAGTA ATTTAAATTT TTGTTTCCTG      60
ACTTTCTGTA GTCCCTAAAC AAACAACAAA AAATCCTAGT AATCTTAAAC TTTTACATTA      120
ATAGAGATCC AAGAGAAAAT AAGCCATTTT TCACCATTGT GGACCCAAAT AAATCATAGA      180
CATGGTATTA AGAAGCCCTT TTCAGTCTGG TTGCAGTATT ATTTTCCTAC CTTTCTTTTT      240
CCTGTTCCCT GCTGTATGCC CACAGCTCGA G                                     271

```

## (2) INFORMATION FOR SEQ ID NO:1494:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

```

GAATTCGGCC TTCATGGCCT AATGGGTCAG AAATTTGGGC CTGGCTAAGT GGATCCTCCA      60
CCCCAGGGTC TCTCACAAGG CTGCAATCAA AGGGCTGACT AGGACTTGGA ATCTCATTTG      120
AAAGTTAGAT TGGGGAAGGA TCTGCTTCCA AGCTCACTCA GTAGTTACTG GCAGGATTAG      180
GTTTCTCCAA GGTGCTTGA CTAAGGGTCT CAGTTCCTCA CTGACAGTTG GCCTGAGGCT      240
GCCTTCAGTT TCTTGCCATG TGGGCTCCC CAGCATAACT GTTTACTTCA TCAAAACAAA      300
CAAACTCGAG                                     310

```

## (2) INFORMATION FOR SEQ ID NO:1495:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 138 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

```

GAATTCGGCC AAAGAGGCCT ACGTCGATTG AATTCTAGAC CTGCCTCAGC TCTAATTATG      60
GTTTCATGTTA GATTGTCTGC CCTTCTCTT CCTTCTCTT TTTGGGGAAA GATAATAGCA      120
CTTAATAACG CCCTCGAG                                     138

```

## (2) INFORMATION FOR SEQ ID NO:1496:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 102 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

```

GAATTCGGCC AAAGAGGCCT ACAAATTGT TCCTTTTACG TACGACAGAC TTCTGAAATG      60
GTAGTAGTAG TAGTGCCCTT TTTTCTCTC TTTTATAGCC AG                                     102

```

## (2) INFORMATION FOR SEQ ID NO:1497:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

```
GAATTCGGCC AAAGAGGCCT ATTTGTTTCT TTGTACTGCC TAACTTTAGA AAGACCTGNA      60
ANCGGTANCA TGAAACATT TTTAGAGAGA ATTACCAGGC ATTTTGGTA GAATGAGTGT      120
TTAATGGAAC AGTCCAGAGA ACTCATCAA GATGTTTATT AAAACGCGCA GACCTGCTCC      180
AATTAAGGGC CCAGTCAGTG GTGTTAACAG TGAAGGGACT GTTCCAGAGG CGTGCTGCAC      240
GGGACGCCCA CCCCAAATAC AAATGGTTTG CCAGTAGCTC ACAAATGAAC CCCATTGCCT      300
TGCACTTAAG CTTCTGAAG CACATACATA TCCTGCTTTG TGCTTTCCGC CCTATAGTAA      360
ACGCAACCA ATGGAGATGT GAAGCAATCT AATAGCAACA AGGCAAACCT CTACTTCCTC      420
TAAAGAGGAT TGCATCCTCT TGCTATCTTT GCCGATGCTC TCCTACAGAC CCATCCGCTC      480
GAG                                                                                   483
```

(2) INFORMATION FOR SEQ ID NO:1498:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

```
GAATTCGGCC AAAGAGGCCT AAAATTTCAG TAGGCTATAG AGTTTCCAT GAGAGTGTGT      60
GTGTGTGTGT GTGTGTGTGT GTGTAAAGAA CTCTTACATT TCAGTGAGAA AATATTTTCA      120
TTGAAAGGAA ACACAGAACT CGAG                                                                                   144
```

(2) INFORMATION FOR SEQ ID NO:1499:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

```
GAATTCGGCC AAAGAGGCCT AAAATAACTG TCCAATTAAC TGAACACTGA GGTAGCTGGG      60
TACAGACTTT AGCGGCTACA TTGACAAAC ATTGCAATTA CAAGCAGCAA CACAAACCAA      120
CCTTGGGATG GGGATAGAAA TCTTTCNTT CTTCTTCTT GGGGGTTGA GACAGAGTCT      180
CGCTCTGTCA CCCAGGCCGG AGTGCACTGG CGCAATCTCC GCTCACTGCA AACTCCACCT      240
CCTGGGTTC AAGTATCCTC CTGCCTCAGC CTCCCAAGTA GCTTGGATTA TGGGTGCCCA      300
CCACCATGCC TGGCTAATTT TTGTATGTTT GATAGAAACG GTGTTTCACC CTGTTGACCA      360
GGCTGGCCTT GAGCTCCTGA CTCAGGTGA TCCACCTGCC TCAGCCCCC GACTCGAG      418
```

(2) INFORMATION FOR SEQ ID NO:1500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACAAAGACCA | AGGTATCACA | TTCTGCCATT | AGCTGCTACC | 60  |
| TCTCCCTTCC | CCATTTTCAG | ACAGATTGAG | CCCACTTTTT | GTGTCCTCCT | CTGCTCTTAA | 120 |
| GCTGTTTCTC | ATCGTGGGTG | CTCAGCAACT | TGTCTGCTCT | CACTCTAGTT | TCTATTGCT  | 180 |
| TCCCTGAAAT | TAGCCTTTAA | CTATGCCAG  | ACAAGCCAGA | GCCTTGCCTA | AACTTCTAAT | 240 |
| TCCTCTGTGC | TTCTTAGTGT | ATCCTTTCTG | CCTGCTTGCC | TGCCTGCCTT | CCTGCCTGCT | 300 |
| TGCCTGCCTT | ACTGACCCTT | TGCCCCACGC | TCTCGAG    |            |            | 337 |

(2) INFORMATION FOR SEQ ID NO:1501:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 105 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1501:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | AAACCGTCGA | TTGAATTCTA | GACCAGCCTC | ATCTCCTGTT | 60  |
| CCTCTCTCCC | TCCCACTAT  | GTTGCCTCC  | CTGCTGCTCC | TCGAG      |            | 105 |

(2) INFORMATION FOR SEQ ID NO:1502:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 701 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1502:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACTGTGAACC | TAAAACTCCT | ATAAAGAAAA | GTAAAGTCTT | 60  |
| AAAAACAAAC | AAATACACAG | CAACAATCTT | ATTTTCCCCA | GCCTGTCTTA | TGTTAGGGTG | 120 |
| CAGATGTGAT | TTCTGTGTGG | CTAATCAGAT | GGCCTTGTGT | GAGAGACTGA | TTTGAACAGA | 180 |
| GGCAGGGGCA | TCCATCTTTC | TAGTGTCACT | CACAGCAGAA | GCAGTGAGGT | CCTGGTGTCT | 240 |
| GTCGCTGCAG | TGGTGGCTTT | TGATACAGGA | GTTCCCTGAT | GGCAGTAGCT | TCTTTGTGGG | 300 |
| TTCAGTTCTG | TTGTGTGGTT | CTGCAAGTTC | AGCTTAGAGT | CTGTTTCTTC | AGCTGTTTCA | 360 |
| ATGACCCTCT | GAGCTGTCTA | CCATGAAAAA | TTCTATCCTG | CTTACACTAA | TTAGAGCCAA | 420 |
| TCCTGTTATI | TACAAATGAA | TATCCTGACC | AGTAATGAAG | GTCTAGACTT | AACTGTAATA | 480 |
| TTTTATGACT | TAAATTGTTG | GCATATGTGA | AAACTTTTGT | TTTATTCTAA | ACTTTTTTGT | 540 |
| TGTTGTTGTA | AAATAAAACA | TTTATGAAAA | GCGCACCAAA | AAGGATAACA | AATGAGAGTA | 600 |
| ATGCAACATA | CAGGCACCAG | CAACTCAGGC | CAGGGAGATG | ATATATGAGC | ATCCCCAATC | 660 |
| TCCCCTTTAC | ACTCCCTCAA | ATAACTCAAT | CAAGACTCGA | G          |            | 701 |

(2) INFORMATION FOR SEQ ID NO:1503:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1503:

|                                      |     |
|--------------------------------------|-----|
| GAATTCGGCC TTCATGGCCT AGGAACTAGG TGA | 60  |
| CTTTTCTCAT CCACGGAAGA GGGGTGAAGA     | 120 |
| TGTTCTGTTT TATATATCCA CCACAGCATG     | 180 |
| AGTTAAACCA AAGTCTGGAT CAGCAGACTG     | 240 |
| CCAGATTTT TTTTACAAA TTTATTAATC       | 257 |
| AATACATTTT GTCCATGTCT ACAGTTGTTT     |     |
| ATGGGGGAGA ACTCGAG                   |     |

(2) INFORMATION FOR SEQ ID NO:1504:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 277 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1504:

|                                   |     |
|-----------------------------------|-----|
| GAATTCGGCC TTCATGGCCT AGGGGACCTT  | 60  |
| GGGAGAATGT AATCCCTGCC CCTAGTCTCA  | 120 |
| GTTTCTGCAT CCACGGAAGA GGGGTGAAGA  | 180 |
| TGGTCCCTAC CCCTCCAGAA TGTTCCTTTT  | 240 |
| TTTTTTTTT AAAAAAAAAA AAAAAAAAAA   | 277 |
| AAAGTACGTT ATGTTTTTCAG ATAAGAACAC |     |
| TTCTTCATGG ATGACTTGAA ATAATTGCCA  |     |
| TGGTCCCTAA GTTTTCCTCT CTGTAGATGA  |     |
| ATGATATAGC TCAGTATCTA AGCAGTGGAT  |     |
| CCTCGAG                           |     |

(2) INFORMATION FOR SEQ ID NO:1505:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 341 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1505:

|                                   |     |
|-----------------------------------|-----|
| GAATTCGGCC TTCATGGCCT AGACCTGCCT  | 60  |
| CGAGCCTCCC AAGCTGCTGG TATTACAGGC  | 120 |
| GTGAACCACT GCACCTGGCC TAATACGATA  | 180 |
| TTCTTACAAT TTAAAAATG AAAGCAGAGG   | 240 |
| AATGGTGGCA GGAAGCTGA CATTTTAAGA   | 300 |
| GTTCACCTCC TTGTAGTTAT CACAGTTAAT  | 341 |
| TCTTACTGTT AGAATAAGTG GTAACCTGCC  |     |
| AAGGTCACAT TGCTAGATGT CAGAGCAGAA  |     |
| ATTAGAAATC AGGTCTAGCC AAGGCCATCA  |     |
| CACTTCTCAG AGCATTAAACA ATTCAATTCA |     |
| GTTAGTGTTT ATTGAACACC TATTGTGTTT  |     |
| TGGCCCTCGA G                      |     |

(2) INFORMATION FOR SEQ ID NO:1506:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 270 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1506:

```

GAATTCGGCC TTCATGGCCT AGGCATTTTG TCTCTAGAAT TACCCACCCG TTCCTGCGCT    60
CTACGGTTCT CCATGCCCCC TCCAGTTTGG GGGTCTAAAC CGAACAGGAG AGGTGCAGGG    120
GACCAGGAGG TGTCCTGGCA CAAAGGTTTC GGGGTCTCCC TGGCAAGGGG TCCCAGGGCC    180
TGGAGCCCCG GGGCCAGCCA AAAGCACACA GCATCAAAAC ATGTTTTTAG TGGGAAGCTC    240
CAGGCCCTGC CCTCCCCGG GGGCCTCGAG                                     270

```

(2) INFORMATION FOR SEQ ID NO:1507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1507:

```

GAATTCGGCC TTCATGGCCT AGAGCAGGAA GATTGTGTGA GTGCTGGGGT TTGGGGGTGC    60
CCAAGTTGGG AACCAGTGGG GGGAGAGAGA GGTAGGAGGT AGATGGATGG AGATCAAAGG    120
CCAGGCCTGT GGCCAAGGGG GCTGCTAACC CTTCAACCCT GTGTTAGCCT GTACACTCAC    180
CAGGCCAGGC TCAGCAGGCG GGCTGTTTAC CTCCTGGCAG CAAATGGTCC AGAATGTGCC    240
CTCGCTGCAG CCCAGCTGGC TCCAGAAGGG GGACCAACAG GGCTGGAGCT ATGCATGCAC    300
AGTGCTTTCT CCCAACCTTG CTTCTGAGAA AAGTGTCCCT GCGAGGGCCC TGGAGGAGGG    360
AGCTAGGGAC CAGCAGAAGG GCCTAGGTTT CTGTAGCATC ATTTTTAGCC CTGGCTGAAT    420
CTGGGAAGCA CCTGGTGGCT TTAACATTCC CGTTAGCTCG AG                                     462

```

(2) INFORMATION FOR SEQ ID NO:1508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 694 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1508:

```

GAATTCGGCC TTCATGGCCT AGTCACAATC CACTTAAAGA AGTTTGGTTA TATTTAGTG    60
AAAATTTTCT TCCAGAGTAG GTTTTTTTC GTGGGTGGG GGGTAACTTT ACTACAATTA    120
GTAAGTATGG TGCAGAATT CATGCAAATG AGGAGTGCCA GCAGTGTGAT AATTTAAACA    180
TATTTAAACA AAAACAAAAA AAATGAATGC ACAAACTTGC TGCTGCTTAG ATCACTGCAG    240
CTTCTAGGAC CCGGTTTCTT TTAAGTATT AAAAACAAAA CAAAAAATAA TAAAAAAGTT    300
GTGCCTGAAA TGAATCTTGT TTTTTTTTAT AAGTAGCCGC CTGGTTACTG TGTCTGTAA    360
AATACAGACA CTTGACCCCT GGTGTAGCTT CTGTTCAACT TTATATCACG GGAATGGATG    420
GGTCTGATTT CTTGGCCCTC TTCTTGAATT GGCCATATAC AGGGTCCCTG GCCAGTGGAC    480
TGAAGGCTTT GTCTAAGATG ACAAGGTGCA GCTCAGGGGA TGTGGGGGAG GCGGTTTTTA    540
TCTTCCCCTT TGTCGTTTGA GGTTTTGATC TCTGGGTAAA GAGGCCGTTT ATCTTTGTAA    600
ACACGAAACA TTTTTCGTTT CTCAAGTTT CTGTTAATGG CGAAAGAATG GAAGCGAATA    660
AAGTTTTACT GATTTTTGAG AACTAGACT CGAG                                     694

```

(2) INFORMATION FOR SEQ ID NO:1509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1509:

```

GAATTCGGCC TTCATGGCCT AATGAGGTC TATCTAGAGG TGATGGGAGA CAGTGACAGA      60
TCATCAGGCA TTAGATTCTC ATAAGGACTG CGCAACCTAG ATCCCTTGAA TGAACAGTTC      120
ACAATAGGGT TCACTCTCCA ATGAGAATCT AATGCTGCCG CTGATCTGAC AGGTGCCAGA      180
GCTCAGGCGG TAATACGAGA GGCTGGAGAT ACAGATAAAG CTTCAAGTTC TTGCCCCGCA      240
CTTACCTCCT CTTGTGCGGC CCAGTTCCTA ACAGGCCACA GACCGCTACC AGTCCATGGC      300
CTGGAAGTTG GGGACCCCTC TACTGGGATA TTTATAATTG CATATGTGGT TACCTAATAT      360
TTCCATGATA CAACACTGGT CTAGATTCTA GGCCATTCTC CTTCAAAAAG AACCTGCTT      420
CCTTACAGTT TTAAGTTTGA GCAGCAATGT TTTCTACCCC TTCTTAAAT TTTACGCCAC      480
CACACTCGAG                                     490

```

(2) INFORMATION FOR SEQ ID NO:1510:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1510:

```

GAATTCGGCC TTCATGGCCT ACTCTCTCAT TCCTACCCCTC CTCCTCCCA CTCACGCTCC      60
TCCCAATCCC CAAGGTCCCTC TCATTCCCAC CTCCTCCCTC TCCTCTCCTC ACGCTCCCTC      120
CTATCCCCGA GCTCCTCTCT CATCCCTACC CTCCTCCCTC CCACTCAGCG TCCTCCCAAT      180
CCCCAAGGTC CTCTCATTC CACCTTCCTC CCTTCCTCTC CTCACGCTCC TCCCTATCCC      240
CGAGCTCCTC TCTCACTCCC TCCCTCCTCT CATGCTCCTC CCCCCTCTCC TCATGCTCCT      300
CCCCATCCTC GAG                                     313

```

(2) INFORMATION FOR SEQ ID NO:1511:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1511:

```

GCCGGGTGGG CCGGAGGTGG CGCGGCCGCA CGGCTTTGTT CCGGAAAGCC CTTAGGTGGA      60
GAGCGATGTG GGGCGCGGCA GGGGGATCGC GTAGAGGAAC CTTGCGGCAC CGCCTCTCCG      120
GGTCTGGGAA TCTGCTGAAC TCCTTGCCCTC TCTTGGGGTC CCTCGAACGC CCCAGCTAAG      180
AAGGGCGGGG GCCTTGCCAG GCGCGGAGCA ACATGACGTT CAAGGTCTTC CTGTGGCTTC      240
TGTAAGAAA TGTTACGTG GGAGCCTGTC CACATGGGCT GACTAAGGA TCTGGCACGA      300
GGAAGAAATA TCACTGCAGA ACCTGAAGCC CTCGTTGGA AGGGTCACCT CGAG      354

```

(2) INFORMATION FOR SEQ ID NO:1512:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1512:

```

GAATTCGGCC AAAGAGGCCT AGAGCAGCTT GGCTAAAAGT AAGGGTGTCTG TGCTGATGGC      60
CCTGTGCGCA CTGACCCGCG CTCTGCGCTC TCTGAACCTG GCGCCCCCGA CCGTCGCCGC      120
CCCTGCCCGG AGTCTGTTC CCGCCGCCCA GATGATGAAC AATGGCCTCC TCCAACAGCC      180
CTCTGCCTTG ATGTTGTCTCC CCTGCCGCC AGTTCTTACT TCTGTGGCCC TTAATGCCAA      240
CTTTGTGTCC TGGAAAGATC GTACCAAGTA CACCATTACA CCAGTGAAGA TGAGGAAGTC      300
TGGGGGCCGA GACCACACAG GTGGGAACAA GGACAGGGGG ATTTAAGCAG TCAAAGGAA      360
AAACATGTTA AGACCCTAGA CTGTATATT GACACACAGA ACTCGAG      407

```

## (2) INFORMATION FOR SEQ ID NO:1513:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1513:

```

GAATTCGGCC AAAGAGGCCT ACATTCATAC AATTACAGAA TTCAAATATT GCAAAGGAT      60
GTGTGTCTTT CTCCTCGAGC TCCCTGTTC CCCTTCATTG AAAACCACCA CGGTGCCATC      120
TCTTGTGTAT GCAGGGCTAT GCACCTGCAG GCACGTGTGT ATGCACTCCC CGCTTGTGTT      180
TACACAAGCT GTGGGGTGT ACGCATGCCT GCTTTTTTCA CTTAATAATA CAGCTTGAG      240
AGATTTTGT ATCACATTAT AAATCCCACT CGCTCTTTT GATGGCCACA TAATAACTAC      300
TGCATAATAT GGATACGCCT TATTTGATTT AACTAGTTCC CTAATGATGG ACTTTTAAGT      360
TGTTTCCTTT TTTTTCCTTT TTTGCTACTG CAAACGATGC TATCTAGGCC TCTTTGGCCG      420
AA

```

## (2) INFORMATION FOR SEQ ID NO:1514:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1514:

```

GAATTCGGCC AAAGAGGCCT ATGGAATTC AAGACCTGAT GTTTGAGGAG ATGAGGGAAA      60
CTCTTAAAAA TGACCTAAAA GCAGTTTTCG GAGGAAAAGC TACAATACCT GAGGTAAAGA      120
ATTCAGAGAA CTCCAGTAGT AGGACAGAGT TTCAGCAAAT AATCAATTTA GCATTACAAA      180
AAACAGGGAT GGTAGGGAAA ATAGAAGGAG AAAACTCTAA AATAGGTGAT GATAATGAAA      240
ATTTAACCTT TAAATTAGAA GTAAATGAGC TGAGTGGTAA ATTAGACAAC ACTAACGAAT      300
ACAATAGTAA TGATGGTAAG AAATTACCCC AGGGTGAATC ACGAAGTTAC GAAGTCATGG      360
GAAGTATGGA AGAAACCTTA TGCAATATAG ATGACAGAGA TGGAAATCGC AATGTCCATT      420
TAGAATTTAC AGAAAGAGAG AGTAGGAAGG ATGGAGAGGA TGAATTTGTC AAAGAAAAAC      480

```

TCGAG

485

## (2) INFORMATION FOR SEQ ID NO:1515:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1515:

|   |     |
|---|-----|
| GAATTCGGCC AAAGAGGCCT AGGCACAGAA GGGTGGTGAG TGTGATCAAA TCTAGTCTCA | 60  |
| CTCCCACTTT TTAGTCTCAC TCCTACTTTT GTCCACCACC CAGGCACGGA GAGAAAGGAA | 120 |
| TGTTTAGCAC AAGACACAGC GGAGCTCGGG ATTGGCTAAA CTCCCATAGT ATTTATGGTG | 180 |
| GCCGCCGGCG GGGGCCCCAG CCCAGCTTGC AGGCCACCTC TAGCTTTCTT CCTACCCCAT | 240 |
| TCCCGGCTTC CCTCCTCCTC CCCTGCAGCC TGGTTAGGTG GATACCTGCC CTGACATGTG | 300 |
| AGGCAAGTA AGGCCTGGAG GGTGATGG GAGACCAGGT CCCAAGGGAG CAAGACCTCG    | 360 |
| CGAAGCGCAG CAGCCCCGCG CCTAGGCCTC TTTGGCCGAA                       | 400 |

## (2) INFORMATION FOR SEQ ID NO:1516:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1516:

|   |     |
|---|-----|
| GAATTCGCGG CCGCGTCGAC GTCGACGCGG CCGCSAATTC GGCCAAAGAG GCCTACCCAT | 60  |
| GTCAATCAAG ATGGGTGATT ATGAAATGCC AGACTTCTAA AATAAATGTT TTGGAATTCA | 120 |
| ATGGGTAAAT AAATGCTGGC TCGAG                                       | 145 |

## (2) INFORMATION FOR SEQ ID NO:1517:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1517:

|   |     |
|---|-----|
| GCTGGACCTC CTGTGCAAGA ACATGAAACA GCTGTGGTTC TTCCTTCTCC TGGTGGCAGC | 60  |
| TCCCAGATCG GTTCTGTCCC AGGTGCAGCT GCGGGAGTCG GGCCCAGGAC TGGTGAAGCC | 120 |
| TTCCGAGACC CTGTCCCTCA CCTGCACTGT CTCTGGTACT TCCGTCAGAA GTGTTAGTTA | 180 |
| CGACTGGAGT TGGTCCGGC AGTCCCCGGG GAAGGGACTG GAGTGGCTTG GAGAGATTGA  | 240 |
| TTACAGGGGG AGAGGCAATT ACAACCCGTC CCTCGAG                          | 277 |

## (2) INFORMATION FOR SEQ ID NO:1518:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 161 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1518:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | AAAGAGGCCT | ACTCATGCAC | CTAATTGGAT | CCTATCTTTG | TGTTGTTAGC | 60  |
| TGGTTATTAT | GCAGACTTTA | TTATGTGGTT | GTTTTATAGT | GTCCATAACC | TATGTACTTA | 120 |
| AGTTTGTTTT | TGTGGTGGCG | CTTCCAATTA | GGGCTCTCGA | G          |            | 161 |

(2) INFORMATION FOR SEQ ID NO:1519:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 561 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1519:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GAATTCGGCC | TTCATGGCCT | AATATAAAAC | AATGTTTTTC | AAGGCATTAT | ATAATAGGCT | 60  |
| AAGGACAGTG | ACCTCCAAGA | GACAGCAAAC | AAGGTAATAC | CTGTGACTGC | TCCAGCTTAC | 120 |
| TGCCTTGAGA | GAATTAATAG | TAGGTTTGTG | GTACAGGGAG | GGAGATCCA  | GTGAGAGCCC | 180 |
| AGCGGACTTG | CTGAATTAAG | GAAATGGAGC | TGAGAGTCCA | GAGAGACCAA | CATGGCTAAA | 240 |
| GTTGTCATGA | CAGAGCACTC | AGAACTAGAG | AGCTGCACAG | CAACATAACC | TAAGAGCTCT | 300 |
| GAAGATAATC | TCCCTCAAAT | ACTCAGCTGA | GTAATGATCA | ACATATATGT | GTGAGGAAGC | 360 |
| TATCTGAGGC | TGACAAAGAA | CTGCCTGAAG | AGATTAGAGG | GAACAGTACT | TGGCACTCAC | 420 |
| ACAGAATTGG | AAACTGTACC | TGTTCCCACC | AGCCAAACTG | GAAAAACCTC | AGGATTCATG | 480 |
| GGGTACTCAG | AAAGGACTTG | CATCAGGTAT | GGGGAATAAT | TAGCCCTAGA | CAGAGCACTG | 540 |
| CTCTAATCCC | ATCCACTCGA | G          |            |            |            | 561 |

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145,

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ

ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235,

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID

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or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109,

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.